#### State of Florida



## RECEIVED-FP Jublic Serbice Commission

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COMMISSION CLERK

-M-E-M-O-R-A-N-D-U-M-

FPSC-COMMISSION CLERK

DATE:

February 8, 2012

TO:

Shevie B. Brown, Regulatory Analyst IV, Division of Regulatory Analysis 54th

FROM:

Ann Cole, Commission Clerk, Office of Commission Clerk

RE:

Docket No. 110316-EM Utility Emergency Plan Filings

#### Dear Ms. Cole:

Staff has directly received the 2012 Emergency Fuel Plans from Lakeland Electric, Tampa Electric Company, Seminole Electric Cooperative, Inc., Utilities Commission City of New Smyrna Beach, Reedy Creek Improvement District, and the City of Tallahassee. Please file the attached documents in Docket No. 110316-EM for each utility. The documents consist of:

- Lakeland Electric Summary of Fuel Plan Revisions for 2012
- Lakeland Electric Emergency Fuel Plan
- Lakeland Electric Energy Emergency Shortage Plan
- Tampa Electric Company's 2012 Long-Term Energy Emergency Plan
- Seminole Electric Cooperative, Inc. Fuel Emergency Plan (CLEAN) 1-30-12
- Seminole Electric Cooperative, Inc. Fuel Emergency Plan (REDLINE) 1-30-12
- Utilities Commission, City of New Smyrna 2012 Long Term Energy Emergency Plan
- Reedy Creek Improvement District long-term fuel plan
- City of Tallahassee Fuel Emergency Plan Clean
- City of Tallahassee Fuel Emergency Plan Redline

In addition, please update the Commissions Master Commission Directory to show that Jim Howard, Manager of Electric System Compliance, is the primary contact for Lakeland Electric's Emergency Energy plans.

If you have any questions regarding these requests, please feel free to give me a call.

#### **ATTACHMENTS**

COM		
APAcc	Larry Harris, Senior Attorney	
ECR	Thomas E. Ballinger, Utilities System/Engineering Spec Supervisor	
GCL		
RAD		
SRC		
ADM	Boston	
OPC	OCCUMENT NUMBER-DA	Ţŗ
CLK NG	00780 FFR-00	

#### Lakeland Electric summary of Emergency Fuel Plan revisions for 2012

- A. Removed Introduction section
- B. Added declaration responsibility to include Governor of Florida, and L.E. Fuel Manager.
- C. Added contact responsibility for the "FRCC Director of Operations" to the Energy Emergency Coordinator.
- D. Removed Definition section
- E. Removed reference "first 30 days and then weekly for up to 75 days"
- F. Identified Energy Emergency Coordinator as the Manager of System Control.
- G. Removed section titled "Energy Emergency Plan Summary"
- H. Removed reference to Voltage Reduction.
- I. Updated "Energy Emergency Contact List"
- J. Restructured Plan to include a general overview of responsibilities, and added appendixes of each individual groups detailed Energy Emergency Plans.



#### **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 short-term or long-term energy emergency caused by a fuel supply shortage in order to maximize capacity or conserve the fuel in short supply. A fuel emergency may be declared by the Governor of Florida, or the Fuels Manager for Lakeland Electric.

APPLICABLE NERC STANDARDS AND REQUIREMENTS

EOP-001 - Elements Identified in "Attachment 1".

REVIEW CYCLE

Annual - Once per calendar year or if procedure changes.

#### POSTING/PUBLISHING

- <u>FRCC</u> Document to be posted to the FRCC ROG site, annually or if procedural changes are made.
- <u>FPSC</u> Document to be submitted to the Florida Public Service Commission every three years or if procedural changes are made.

#### **CONTACTS**

Referenced points of contact within this plan are listed in "Appendix I – Energy Coordinator Contact List".

#### **PROCEDURE**

### 1. Fuel Emergency Identified:

The Fuels Manager is the individual responsible for identifying a Fuel Emergency.

When a Fuel Emergency has been identified the Fuels Manager will notify the General Manager.



#### 2. FUEL EMERGENCY DECLARED:

When the General Manager has been informed by the Fuels Manager that a Fuel Emergency has been identified, the General Manager will "Declare a Fuel Emergency and perform the following:

- Direct the Fuels Manager to inform the Energy Emergency Coordinator that a Fuel Emergency has been declared.
- Inform the City Manager

#### 3. ENERGY EMERGENCY COORDINATOR NOTIFICATION:

The Fuels Manager (by direction of the General Manager) will notify the Manager of System Control, who will act as the Energy Emergency Coordinator, that a Fuel Emergency has been declared.

#### 4. EMERGENCY FUEL PLAN INITIATED:

The Energy Emergency Coordinator is responsible for completing the following:

### a. Notifying the Assistant General Managers

- AGM's will inform their divisions.

## b. NOTIFY THE FOLLOWING TO IMPLEMENT THE "EMERGENCY FUEL PLAN"

- System Control
- Power Production
- Communications
- Account Managers
- Facilities
- Technical Services
- Energy Resources
- Fuels



#### C. NOTIFICATION OF GOVERNMENTAL AGENCIES (THIS WILL BE COORDINATED WITH SYSTEM CONTROL)

Notification of applicable governmental agencies as the various steps of the Emergency Fuel Plan are implemented

The Energy Emergency Coordinator will use a check-list that will contain the following:

- Date's and Time's when each of the above were notified and updated.
- Date's and Time's when entities in above complete their steps of the Emergency Fuel Plan.

The Energy Emergency Coordinator will repeat the above notification process when the Fuel Emergency is over.

The General Manager will be informed of the end of the fuel emergency.

#### 5. SYSTEM CONTROL:

When notified by the Energy Emergency Coordinator to implement the Fuel Emergency Plan, System Control will perform the following in accordance with their Procedure, Appendix A:

#### a. Notify IPP's:

No Identified IPP's in Lakeland Electric's control.

## b. There are no IPP's under Lakeland's ControlFuel Switching:

The Fuel Manager will identify which Fuel is in short supply; this will dictate what alternative Fuel is to be used.

This will be in conjunction with Power Production, Fuel's and FMPP's plans.

## C. OPTIMIZE FUEL SUPPLY:

The Fuel Manager will identify which Fuel is in short supply; this will dictate what alternative Fuel is to be used.

This will be in conjunction with Power Production, Fuel's and FMPP's plans.



#### d. MAXIMIZING GENERATOR OUTPUT AND AVAILABILITY:

The Fuel Manager will identify which Fuel is in short supply, this will dictate what alternative Fuel is to be used, which in turn will dictate what units will be required to run.

This will be in conjunction with Power Production, Fuel's and FMPP's plans.

#### e. Purchasing Power:

This will be in conjunction with Energy Resources Procedure and FMPP's plans.

#### f. LOAD MANAGEMENT:

Be prepared to implement Load Management if available.

#### g. VOLTAGE REDUCTION:

Lakeland Electric does not use Voltage Reduction.

#### h. INTERRUPTIBLE & CURTAILABLE LOADS:

Use of interruptible and curtailable customer loads to reduce capacity requirements or to conserve the fuel in short supply.

## i. LOAD CURTAILMENT:

Implement Load Shedding.

## j. <u>Notifications to Applicable Operating & Governmental</u>

#### **AGENCIES:**

This will be coordinated through the Energy Emergency Coordinator.

In the event of a long term fuel emergency, the Energy Emergency Coordinator is responsible for notifying the FRCC Director of Operations.

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# Electric System Control - System Operating Procedures "Emergency Fuel Shortage Plan"

## K. PROVISIONS FOR THE FULL REIMBURSEMENT BY AN ELECTRIC UTILITY RECEIVING ENERGY OR FUEL DURING AN ENERGY EMERGENCY:

Full reimbursement shall be all of the supplying utility's cost of replacing such energy or fuel with the same or alternate fuel or energy.

This will be in conjunction with Energy Resources Procedure and FMPP's plans.

#### 6. POWER PRODUCTION

When notified by the Energy Emergency Coordinator to Implement the Fuel Emergency Plan, Power Production will perform the following in accordance with their procedure, Appendix B.

#### a. Fuel Switching:

The Fuel Manager will identify which Fuel is in short supply; this will dictate what alternative Fuel is to be used.

This will be in conjunction with System Controls Procedure, Fuel's Procedure, and FMPP's plans.

## b. OPTIMIZE FUEL SUPPLY:

The Fuel Manager will identify which Fuel is in short supply; this will dictate what alternative Fuel is to be used.

This will be in conjunction with System Controls Procedure, Fuel's Procedure, and FMPP's plans.

## C. MAXIMIZING GENERATOR OUTPUT AND AVAILABILITY:

The Fuel Manager will identify which Fuel is in short supply, this will dictate what alternative Fuel is to be used which in turn will dictate what units will be required to run.

This will be in conjunction with System Controls Procedure, Fuel's Procedure, and FMPP's plans.

## d. System Energy Use:

The reduction of the plant's own energy use to a minimum.



#### 7. FUELS:

When notified by the Energy Emergency Coordinator to Implement the Fuel Emergency Plan, Fuel's will perform the following in accordance with their procedure, Appendix C:

#### a. Fuel Supply and Inventory:

Execute the fuel supply and inventory plan that recognizes reasonable delays or problems in the delivery or production of fuel.

#### **b.** OPTIMIZE FUEL SUPPLY:

Execute a plan for operation of all generating sources to optimize the fuel availability.

This will be in conjunction with Power Production Procedure, and FMPP's Plans.

## C. FORECASTING THE EXTENT OF THE FUEL SHORTAGE:

Execute the procedure for forecasting the extent of the fuel shortage.

## d. Notifying Entities and Department of Fuel Inventories

Execute the procedure for notifying applicable entities and departments (i.e. daily, weekly) of fuel inventories

# e. <u>Provisions for the full reimbursement by an electric utility</u> RECEIVING ENERGY OR FUEL DURING AN ENERGY EMERGENCY:

Provisions for the full reimbursement by an electric utility receiving energy or fuel during an energy emergency. Full reimbursement shall be all of the supplying utility's cost of replacing such energy or fuel with the same or alternate fuel or energy.

This will be in conjunction with Energy Resources, and System Controls Procedures.



#### 8. COMMUNICATIONS

When notified by the Energy Emergency Coordinator to Implement the Fuel Emergency Plan, Communications will perform the following in accordance with their procedure, Appendix D:

#### a. System energy use:

Request the reduction of Lakeland Electric & City of Lakeland own energy use to a minimum.

#### b. Public Appeals:

Appeals to the public through all media for voluntary load reductions and energy conservation including educational messages on how to accomplish such load reduction and conservation.

#### c. Requests of Government:

Requests to appropriate government agencies to implement programs to achieve necessary energy reductions.

Notification of governmental officials and the news media.

## 9. ACCOUNT MANAGERS

When notified by the Energy Emergency Coordinator to Implement the Fuel Emergency Plan, Account managers will perform the following in accordance with their procedure, Appendix E:

#### a. Public appeals:

Appeals to the public through all media for voluntary load reductions and energy conservation including educational messages on how to accomplish such load reduction and conservation.

Account Managers will contact assigned account customers via email and/or phone requesting voluntary load reduction and energy conservation.

"Emergency"



#### b. Appeals to Customers to use Alternate Fuels:

In a fuel emergency, appeals to large industrial and commercial customers to reduce non-essential energy use and maximize the use of customer-owned generation that rely on fuels other than the one in short supply.

Account Managers will maintain list of commercial/industrial customers with onsite generation.

In the event of a fuel shortage, the Account Managers will contact customers with generation and request they reduce non-essential usage and run onsite generation.

#### 10. FACILITIES

When notified by the Energy Emergency Coordinator to implement the Fuel Emergency Plan, Facilities will perform the following in accordance with their procedure, Appendix F:

#### a. System Energy Use:

When notified by the Energy Emergency Coordinator to implement the Fuel Emergency Plan, Facilities will take steps to reduce electric energy use by all City facilities (including Lakeland Electric facilities).

## 11. TECHNICAL SERVICES

When notified by the Energy Emergency Coordinator to implement the Fuel Emergency Plan, Technical Services will perform the following in accordance with their procedure, Appendix G:

### a. **Environmental Constraints**:

Execute plans to seek removal of environmental constraints for generating units and plants (This takes the FRCC Plan into consideration and coordination).



#### 12. ENERGY RESOURCES

When notified by the Energy Emergency Coordinator to implement the Fuel Emergency Energy Resources will perform the following in accordance with their procedure, Appendix H:

#### a. Purchase Power

Purchasing power from other sources (This must be developed in conjunction with System Control Procedure and FMPP's plans).

#### b. OPTIMIZE FUEL SUPPLY:

Assist with the scheduling of all generating sources to optimize the availability (This must be developed in conjunction with System Control Procedure, Power Production Procedure, Fuel's Procedure, and FMPP's Plans.

#### C. MAXIMIZING GENERATOR OUTPUT AND AVAILABILITY:

Assist with the scheduling of all generating sources to maximize output and availability. This should include plans to winterize units and plants during extreme cold weather (This must be developed in conjunction with System Control Procedure, Power Production Procedure, Fuel's Procedure, and FMPP's Plans).

## d. ARRANGE DELIVERIES OF ELECTRICAL ENERGY OR FUEL:

Arrange deliveries of electrical energy or fuel from remote systems through normal operating channels.

#### REFERENCE DOCUMENTS

Document Title	Document ID	Date
"FRCC Florida Electrical Emergency Contingency Plan" (Fuel Supply Shortage Element)	N/A	Current Version

"Emergency"



## Electric System Control - System Operating Procedures

"Emergency Fuel Shortage Plan"

Version	Authority	Action/Description	Date
1.0	Elwing, Paul	Document Creation	1998.11.00
2.0	Elwing, Paul	Reviewed/Revised	2003.04.00
3.0	Elwing, Paul	Reviewed/Revised	2004.04.00
4.0	Elwing, Paul	Reviewed/Revised	2005.01.00
5.0	Elwing, Paul	Reviewed/Revised	2007.06.00
6.0	Gilbert, Richard	Reviewed/Revised	2007.10.25
7.0	Hiestand, Mike	Reviewed/Revised	2008.07.07
8.0	Hiestand, Mike	Reviewed/Revised	2008.09.01
9.0	McCarthy, Suzanne	Reviewed/Revised	2008.11.21
10.0	Snyder, Rick	Reviewed/Revised	2008.12.05
10.1	Hiestand, Mike	Reviewed/Revised (previous version 9.0)	2009.08.07
10.2	Rinier, Becky	Converted to the Compliance Format; Corrected Version Numbers(previous version 10.0)	2009.10.05
10.3	Rinier, Becky	Formatting; Updated Notes; New Document Number (previous version 11.0)	2010.04.19
10.4	Smith, Rich	Updated Section 5.3 Step C, Sections 'Oil' and 'Coal'; Document Reviewed and Approved (previous version 12.0)	2010.08.02
10.5	Smith, Rich	Removed contact names and replaced/updated contact titles in section 18 "Energy Emergency Contact List" (previous version 13.0)	2010.08.04
10.6	Brown, Greg	Reformatted; Divided sections by department/division; added appendices for each department/division; grammatical changes	2011.07.18



		(previous version 14.0)	
10.7	Curry, Joey	Added "Arrange Deliveries of Electrical Energy or Fuel" to the "Energy Resources" section and "Fuels"; Reworded reference to IPP (previous version 15.0)	2011.10.28
11.0	Curry, Joey	Corrected version numbers to reflect draft versions per Jim Howard (Manager of Electric System Compliance); Added 'Coordination/Approval History' section; Added notification of FRCC Operations Manager, added appendix I	2012.01.03

## COORDINATION/APPROVAL HISTORY

Version	Submitted To:	Submittal Date:	Approval Date:
10.0	FPSC	2009.01.21	2009.04.15
11.0	ORS	2011.01.17	2011.01.17
11.0	FPSC	2011.01.31	Annual Control of the



## Electric System Control - System Operating Procedures "Appendix A – System Control Emergency Fuel Shortage Procedure"

#### **PURPOSE**

The purpose of this Procedure is to expand on the elements outlined in the Emergency Fuel Shortage Plan (LAK-SYS-E11).

APPLICABLE NERC STANDARDS AND REQUIREMENTS

EOP-001 - Elements Identified in "Attachment 1".

REVIEW CYCLE

Annual - Once per calendar year or if procedure changes.

POSTING/PUBLISHING

N/A – Not Applicable.

**PROCEDURE** 

#### 1. System Control:

When notified by the Energy Emergency Coordinator to implement the Fuel Emergency Plan, System Control will perform the following:

#### a. Notify IPP's:

No Identified IPP's in Lakeland Electric's control.

#### b. Fuel Switching:

System Control will relay information for loss of communication.

#### C. OPTIMIZE FUEL SUPPLY:

System Control will relay information for loss of communication.

#### d. MAXIMIZING GENERATOR OUTPUT AND AVAILABILITY:

System Control will relay information for loss of communication.



## Electric System Control - System Operating Procedures

"Appendix A – System Control Emergency Fuel Shortage Procedure"

#### e. Purchasing Power:

The System Operator will communicate with LAK's Energy Resource Specialist.

#### f. LOAD MANAGEMENT:

Be prepared to implement Load Management if available.

#### g. VOLTAGE REDUCTION:

Lakeland Electric does not use Voltage Reduction.

#### h. INTERRUPTIBLE & CURTAILABLE LOADS:

Communicate with Account Managers to alert Interruptible & Curtailable customers.

#### i. LOAD CURTAILMENT:

Implement Load Shedding, see LAK-SYS-E06 "Load Shedding Plan".

# j. NOTIFICATIONS TO APPLICABLE OPERATING & GOVERNMENTAL AGENCIES:

- FRCC Reliability Coordinator
- FMPP BA
- OUC
- TECO
- PEF
- k. Provisions for the full reimbursement by an electric utility receiving energy or fuel during an energy emergency:

Coordinate with the LAK's Energy Resource Specialist.



## Electric System Control - System Operating Procedures

"Appendix A ~ System Control Emergency Fuel Shortage Procedure"

### REFERENCE DOCUMENTS

Document Title	Document ID	Date
"Load Shedding Plan"	LAK-SYS-E06	Current Version

Version	Authority	Action/Description	Date
1.0	Greg Brown	Document Creation	2011.07.18
2.0	Joey Curry	Grammatical correction to section "Notify IPP's"; added Energy Coordinator Contact List reference	2011.10.28
3.0	Joey Curry	Reinserted Contact list and updated	2012.01.05



## Power Production - Standard Operating Procedures

"Appendix B – Power Production Emergency Fuel Shortage Procedure"

#### **PURPOSE**

The purpose of this Procedure is to expand on the elements outlined in the Emergency Fuel Shortage Plan (LAK-SYS-E11).

APPLICABLE NERC STANDARDS AND REQUIREMENTS

EOP-001 - Elements Identified in "Attachment 1".

REVIEW CYCLE

<u>Annual</u> – Once per calendar year or if procedure changes.

POSTING/PUBLISHING

N/A – Not Applicable.

**PROCEDURE** 

#### 1. POWER PRODUCTION

When notified by the Energy Emergency Coordinator to Implement the Fuel Emergency Plan, Power Production will perform the following:

#### a. Fuel Switching:

#### UNIT 1:

In the event of a gas shortage and U1 is needed to make generation needs and as directed by the Balance Authority U1 fuel should be changed to #6 high sulfur fuel oil. The procedure 1160 combination fuel firing should be used. If the shortage is Fuel oil then the same procedure can be used for gas to oil.

#### Unit 2:

In the event of a gas shortage and U2 is needed to make generation needs and as directed by the Balance Authority U2 fuel should be changed to #6 low sulfur fuel oil. The procedure 2160 combination fuel firing should be used. If the shortage is Fuel oil then the same procedure can be used for gas to oil.



## Power Production - Standard Operating Procedures

"Appendix B – Power Production Emergency Fuel Shortage Procedure"

#### Unit 8:

In the event of a gas shortage and U8 is needed to make generation needs and as directed by the Balance Authority U8 fuel should be changed to #2 Diesel.

#### Unit 3:

In the event of a coal shortage and U3 is needed to make generation needs as determined by the Balance Authority the following procedure should be used. Reduce all coal flows and supplement gas igniters as needed to make load as requested by the Balance Authority. If the emergency continues and silos are still low on coal then one compartment of coal can be removed and supplemented with gas. The compartments can then be alternated in and out to balance the levels in the silos and conserve coal as long as possible. If the shortage continues with no relief then the Unit load should be reduced to a minimum of 180 mws and 3 mill operation. With 4 silos full (700 tons per silo) it should be enough coal for approximately 37 hours of operation at 180 mws. If the coal shortage continues then the unit load should be reduced to approx. 50 mws and gas added as coal is removed until all coal runs out. The unit load can be adjusted on 100 % gas as needed (50-75 mws).

#### Unit 5:

In the event of a gas shortage Unit 5 load will have to be adjusted as gas allotment allows. Unit 5 has no backup fuel so with no gas the unit will have to be removed from service. The unit can run at a reduced load (35%) as gas allows. The usage will be monitored by the MCO and the unit removed from service when there is no more gas.

#### **b.** OPTIMIZE FUEL SUPPLY:

During a fuel shortage all testing of back up systems should be suspended until after the emergency is over. No valve testing



## Power Production - Standard Operating Procedures

"Appendix B – Power Production Emergency Fuel Shortage Procedure"

or pump changeover should be done during this emergency. No monthly or quarterly test running of generators should be conducted so as to conserve fuel.

#### C. MAXIMIZING GENERATOR OUTPUT AND AVAILABILITY:

All heat tracing on all units should be double checked for proper operation once the emergency is declared. The annual work orders in Maximo for heat trace inspection and PM should be verified complete.

Ensure that essential equipment is available and released from maintenance activities to maximize generator output and availability.

#### d. System Energy Use:

In an emergency and system energy use needs to be reduced, all non essential systems should be shutdown. All lighting, fans and pumps not needed should be shutdown. All computers and A/C systems not needed after hours should be turned off.

No one shall take any actions or perform any maintenance that may jeopardize the steady state of operation of any system or unit that have been declared part of the emergency.

#### REFERENCE DOCUMENTS

Document Title	Document ID	Date

#### REVISION HISTORY

Version	Authority	Action/Description	Date
1.0	Donald Raines Kevin Robinson	Document Creation	2011.07.18

"Emergency"



# Fuels - Standard Operating Procedures "Appendix C – Fuels Emergency Fuel Shortage Procedure"

#### **PURPOSE**

The purpose of this Procedure is to expand on the elements outlined in the Emergency Fuel Shortage Plan (LAK-SYS-E11). Energy Production / Fuels group is responsible for keeping fuel supplied to Lakeland Electric generators. Maintaining supplies of adequate amounts of fuels will:

- Assure adequate supplies of fuel for power generation.
   Develop plans of replenishment of primary and alternate fuel supplies under ordinary and emergency scenarios.
- Assess risks in physical fuel supply chain and develop targets that balance risk abatement at reasonable costs.
- Actively pursue a plan of inventory as follows (Levels assessed and adjusted (up or down) per management discretion):
  - Coal Volumes: Winter (Dec April) 40,000 73,000 tons;
  - Summer (May Nov.) 64,000 112,000 tons
  - Oil: Assessed storage levels for: market and expected dispatch and replenishment
- Determine minimum volumes of natural gas to run generating units at minimum load, and attempt to secure those volumes for delivery

APPLICABLE NERC STANDARDS AND REQUIREMENTS

EOP-001 - Elements Identified in "Attachment 1".

REVIEW CYCLE

Annual – Once per calendar year or if procedure changes.

POSTING/PUBLISHING

N/A – Not Applicable.

**PROCEDURE** 

#### 1. FUELS:

At all times Energy Production / Fuels group shall engage in surveillance of physical conditions of access to primary and alternate generation fuel resources, Assessing changes in risk



## Fuels - Standard Operating Procedures

"Appendix C – Fuels Emergency Fuel Shortage Procedure"

condition and communicating prevailing and developing factors that may affect a shortage emergency to supervisor, plant and electric dispatching operations.

Prior to any fuel emergency condition such as a storm or condition that may affect fuel delivery and replenishment. Fuels Purchasing shall coordinate efforts to determines appropriate inventory for fuel oil and solid fuel, and insure that purchases are arranged to achieve those inventory levels.

All operations and activity of Energy Fuels Purchasing personnel during any impending or developing fuel emergency condition shall support the best efforts of plant and electric dispatching operations to assure sustainable operations.

Following the storm or any fuel emergency condition Fuel Purchasing personnel will endeavor to secure fuel supply for Lakeland Electric generators to fulfill replenishment of any shortfall / gaps created under the extraordinary condition.

When notified by the Energy Emergency Coordinator to Implement the Fuel Emergency Plan, Fuel's will perform the following:

#### e. Fuel Supply and Inventory:

■ Phase I – Readiness

Review the Fuels Purchasing section of the EOP with all members of the group

Determine the appropriate inventory levels for fuel oil, diesel oil and solid fuel. Fill tanks and have solid fuel delivered to achieve the desired inventory levels

Work on natural gas portfolio to include access to some storage gas

Phase II – Watch

Discuss storm plans with fuel vendors and transportation providers, such as trucking companies and CSX railroad.



## Fuels - Standard Operating Procedures

"Appendix C - Fuels Emergency Fuel Shortage Procedure"

Monitor storm track and evacuations from natural gas production areas

#### Phase III –Warning

Top-off fuel tanks

Coordinate train deliveries of coal to be unloaded and departed from the power plant at least 12 hours prior to the storm arrival

Coordinate truck deliveries of solid fuel to be unloaded and departed from the power plant at least 12 hours prior to the storm arrival

#### Phase IV –Emergency

Shut down all train and truck deliveries of fuel to the power plants

#### Phase V – Restoration

Coordinate deliveries of natural gas based upon the intended schedule for gas burning generators

Coordinate deliveries of solid fuel and oils pursuant to the intended schedule of the generators

#### f. OPTIMIZE FUEL SUPPLY:

See Phase 1 – Phase V above.

## g. Forecasting the Extent of the Fuel Shortage:

See Phase 1 - Phase V above.

## h. Notifying Entities and Department of Fuel Inventories

Energy Production/Fuels will inform System Control and plant operations of measures being taken in the event of a Fuel Emergency.

Energy Production/Fuels will coordinate with any appropriate government agency as the various affected steps of the Fuel emergency plan are implemented.



## Fuels - Standard Operating Procedures

"Appendix C - Fuels Emergency Fuel Shorfage Procedure"

Energy Production/Fuels will also communicate internal cost accounting issues that may affect or cause need to adjust the fuel rate during an emergency of fuel. The intent of this its to assure timely reimbursement I of supplying utility's cost of fuel with the same of alternate fuel or energy during the emergency event(s).

# i. PROVISIONS FOR THE FULL REIMBURSEMENT BY AN ELECTRIC UTILITY RECEIVING ENERGY OR FUEL DURING AN ENERGY EMERGENCY:

Document all financial activities pre and post storm for possible FEMA reimbursement.

Document any activities that would help enhance the overall EOP plan and provide them as lessons learned to the Restoration Team.

#### i. ARRANGE DELIVERIES OF ELECTRICAL ENERGY OR FUEL:

Coordinate with FMPP to arrange deliveries of fuel from remote systems through normal operating channels.

#### REFERENCE DOCUMENTS

	Document Title	Document ID Date
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I		

Version	Authority	Action/Description	Date
1.0	Phil Rogers	Document Creation	2011.07.18
2.0	Phil Rogers	Added section "Arrange Deliveries of Electrical Energy or Fuel"	2011.10.28
			AND THE RESIDENCE OF THE STATE

"Emergency"	
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## Communications - Standard Operating Procedures

"Appendix D – Communications Emergency Fuel Shortage Procedure"

#### **PURPOSE**

The purpose of this Procedure is to expand on the elements outlined in the Emergency Fuel Shortage Plan (LAK-SYS-E11).

Applicable NERC Standards and Requirements

EOP-001 - Elements Identified in "Attachment 1".

REVIEW CYCLE

Annual - Once per calendar year or if procedure changes.

POSTING/PUBLISHING

<u>N/A</u> – Not Applicable.

PROCEDURE

#### 1. COMMUNICATIONS

When notified by the Energy Emergency Coordinator to Implement the Fuel Emergency Plan, Communications will perform the following:

#### a. System energy use:

See the Generation Deficiency Communications section in the City of Lakeland's Crisis Communication Plan.

#### b. Public Appeals:

See the Advisory and Alert sections under Generation Deficiency Communications in the City of Lakeland's Crisis Communication Plan.

#### c. REQUESTS OF GOVERNMENT:

See the Advisory and Alert sections under Generation Deficiency Communications in the City of Lakeland's Crisis Communication Plan



## Communications - Standard Operating Procedures

"Appendix D – Communications Emergency Fuel Shortage Procedure"

## REFERENCE DOCUMENTS

Document ID	Date
N/A	Current Version

Version	Authority	Action/Description	Date
1.0	Kevin Cook	Document Creation	2011.07.18
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## Account Managers - Standard Operating Procedures

"Appendix E – Account Managers Emergency Fuel Shortage Procedure"

#### **PURPOSE**

The purpose of this Procedure is to expand on the elements outlined in the Emergency Fuel Shortage Plan (LAK-SYS-E11).

APPLICABLE NERC STANDARDS AND REQUIREMENTS

EOP-001 - Elements Identified in "Attachment 1".

REVIEW CYCLE

<u>Annual</u> – Once per calendar year or if procedure changes.

POSTING/PUBLISHING

N/A – Not Applicable.

**PROCEDURE** 

#### 1. ACCOUNT MANAGERS

When notified by the Energy Emergency Coordinator to Implement the Fuel Emergency Plan, Account managers will perform the following:

#### a. Public appeals:

Account Managers will contact assigned account customers via email and/or phone requesting voluntary load reduction and energy conservation.

## b. Appeals to Customers to use Alternate Fuels:

Account Managers will maintain list of commercial/industrial customers with onsite generation.

In the event of a fuel shortage, the Account Managers will contact customers with generation and request they reduce non-essential usage and run onsite generation.

#### REFERENCE DOCUMENTS

Document Title Document ID Date
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## Account Managers - Standard Operating Procedures

"Appendix E – Account Managers Emergency Fuel Shortage Procedure"

"Large Customer Generator Sizes"	n/a	Current Version
"Top 100 Electric Customers by Revenue"	n/a	Current Version

Version	Authority	Action/Description	Date
1.0	John Adkinson	Document Creation	2011.07.18
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## Facilities - Standard Operating Procedures

"Appendix F – Facilities Emergency Fuel Shortage Procedure"

#### **PURPOSE**

The purpose of this Procedure is to expand on the elements outlined in the Emergency Fuel Shortage Plan (LAK-SYS-E11).

APPLICABLE NERC STANDARDS AND REQUIREMENTS

EOP-001 - Elements Identified in "Attachment 1".

REVIEW CYCLE

Annual - Once per calendar year or if procedure changes.

POSTING/PUBLISHING

N/A – Not Applicable.

PROCEDURE

#### 1. FACILITIES

### a. System Energy Use:

When notified by the Energy Emergency Coordinator to implement the Fuel Emergency Plan Facilities Maintenance will implement the following procedure in order to reduce electric energy usage within the major city buildings:

- 1) Automatically raise and lock air conditioning temperature set points.
- 2) Set time schedules on air conditioners to turn off after work hours.
- 3) Turn off lights in offices that have exterior windows.
- 4) Turn off interior building lighting after work hours.
- 5) Turn off non essential garage lighting during daylight hours.
- 6) Turn off all non essential exterior building and sign lights.
- 7) Turn off exterior sports complex lighting.



## Facilities - Standard Operating Procedures

"Appendix F – Facilities Emergency Fuel Shortage Procedure"

8) Power production facilities are excluded from this action.

When notified by the Energy Emergency Coordinator that the Fuel Emergency Plan is no longer in effect Facilities will act to return city facilities to normal operating mode

#### REFERENCE DOCUMENTS

Document Title	Document	ID Date

Version	Authority	Action/Description	Date
1.0	Richard Baker	Document Creation	2011.07.18
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"Appendix G – Technical Services Emergency Fuel Shortage Procedure"

#### **PURPOSE**

The purpose of this Procedure is to expand on the elements outlined in the Emergency Fuel Shortage Plan (LAK-SYS-E11).

APPLICABLE NERC STANDARDS AND REQUIREMENTS

EOP-001 - Elements Identified in "Attachment 1".

REVIEW CYCLE

Annual - Once per calendar year or if procedure changes.

POSTING/PUBLISHING

N/A – Not Applicable.

PROCEDURE

#### 1. TECHNICAL SERVICES

When notified by the Energy Emergency Coordinator to implement the Fuel Emergency Plan, Technical Services will perform the following:

#### a. Environmental constraints:

Environmental Permitting will coordinate activities with the City Attorney/FRCC/FCG (depending on specific issue) toward obtaining necessary Federal and State regulatory variances. See Environmental Permitting Fuel Emergency Preparedness Plan for more detail.

#### REFERENCE DOCUMENTS

Document Title	Document ID	Date
"Environmental Permitting Fuel Emergency Preparedness Plan"	N/A	Current Version



"Appendix G – Technical Services Emergency Fuel Shortage Procedure"

Version	Authority	Action/Description	Date
1.0	Bret Galbraith	Document Creation	2011.07.18
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"Appendix H – Energy Resources Emergency Fuel Shortage Procedure"

#### **PURPOSE**

The purpose of this Procedure is to expand on the elements outlined in the Emergency Fuel Shortage Plan (LAK-SYS-E11).

APPLICABLE NERC STANDARDS AND REQUIREMENTS

EOP-001 - Elements Identified in "Attachment 1".

REVIEW CYCLE

<u>Annual</u> – Once per calendar year or if procedure changes.

POSTING/PUBLISHING

N/A – Not Applicable.

**PROCEDURE** 

#### 1. ENERGY RESOURCES

When notified by the Energy Emergency Coordinator to implement the Fuel Emergency Energy Resources will perform the following:

#### a. Purchase Power

Contact the Wholesale Energy Marketing/Power Pool Coordinator in accordance with FMPP-PLA-002 "Capacity Energy Fuel Emergency Plan" to schedule power purchases.

#### b. OPTIMIZE FUEL SUPPLY:

Contact the Wholesale Energy Marketing/Power Pool Coordinator in accordance with FMPP-PLA-002 "Capacity Energy Fuel Emergency Plan" to schedule generation resources for optimization of fuel supply.

#### C. MAXIMIZING GENERATOR OUTPUT AND AVAILABILITY:

Contact the Wholesale Energy Marketing/Power Pool Coordinator in accordance with FMPP-PLA-002 "Capacity



"Appendix H – Energy Resources Emergency Fuel Shortage Procedure"

Energy Fuel Emergency Plan" to schedule generation resources.

## d. Arrange Deliveries of Electrical Energy or Fuel:

Coordinate with FMPP to arrange deliveries of electrical energy from remote systems through normal operating channels.

#### REFERENCE DOCUMENTS

Document Title	Document ID	Date
"Capacity Energy Fuel Emergency Plan"	FMPP-PLA-002	Current Version

Version	Authority	Action/Description	Date
1.0	Paul Shipps	Document Creation	2011.07.18
2.0	Paul Shipps	Added section "Arrange Deliveries of Electrical Energy or Fuel"	2011.10.28
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## Energy Resources - Standard Operating Procedures

"Appendix I – Energy Coordinator Contact List"

Energy Emergency Coordinator will Contact the following indicating date, time Caller s' name and comments.

Department or Division	Title	Contact Numbers o = Office; P = Primary; A = Alternate	Date	Time	Callers Name/Comments
Lakeland Electric	General Manager	O: 863.834.6541 P: 863.255.2933 A: None			
Delivery	Assistant General Manager	O: 863834.6521 P: 863.646.5880 A: 863.712.3299			
System Control	Lead Electric System Operator	O: 863.834.5557 or 6150 P: 863.602.1075 A: 863.858.3061			
System Control	Lead Electric System Operator	O: 863.834.5558 or 6150 P: 863.944.7021 A: None			
Production	Assistant General Manager	O: 863.834.6559 P: 863.513.5030 A: 863.606.5689			
Fuel	Manager of Wholesale Energy Fuels	O: 863.834.6586 P: 816.769.1588 A: None			
Customer Service	Assistant General Manager	O: 863.834.6575 P: 863.899.0764 A: 863.937.6741			
Account Manager	Manager of Energy and Business Services	O: 863.834.1237 P: 813.684.6228 A: 813.230.7982			



## Energy Resources - Standard Operating Procedures

"Appendix I – Energy Coordinator Contact List"

Department or Division	Title	Contact Numbers  O = Office: P = Primary: A =  Alternale	Date	Time	Callers Name/Comments
Technical Support	Assistant General Manager	O: 863.834.6603 P: 813.254.3998 A: 863.430.8297			
Marketing	Energy Resource Specialist	O: 863.834.6492 P: 863.860.9023 A: None			
City of Lakeland	City Manager	O: 863.834.6006 P: 863.860.9314 A: None			
City of Lakeland	Deputy City Manager	O: 863.834.6248 P: 863.698.5550 A: None			
Communications	Director of Communications	O: 863.834.6264 P: 863.619.2845 A: 863.860.5836			
Public Works	Facilities Maintenance Manager	O: 863.834.2380 P: 863.430.4033 A: None			
Florida Reliability Coordinating Council	Director of Operations	O: 813.207.7980 P: 813.728.6808 A: None			
Florida Reliability Coordinating Council	OC Chair	O: 904.665.7126 P: 904.945.1258 A: None			
Florida Reliability Coordinating Council	OC Vice Chair	O: 813.739.1251 P: 813.690.3532 A: None			



## **Energy Resources - Standard Operating Procedures**

"Appendix I – Energy Coordinator Contact List"

Department or Division	Title	Contact Numbers  O = Office; P = Primary; A = Alternate	Date	Time	Callers Name/Comments
Florida Reliability Coordinating Council & State Capacity Emergency Coordinator	Reliability Coordinator	O: 305.442.5748 P: 561.738.7481 A: None			
Florida Power and Light	Manager of System Operations	O: 305.442.5020 P: 305.965.3328 A: None			
Florida Power and Light	Director of System Operations	O: 305.442.5022 P: 305.965.3328 A: None			
Florida Municipal Power Pool	Executive Director	O: 407.434.4228 P: 407.719.7575 A: None			
Florida Municipal Power Pool	Coordinator of Energy Control	O: 407.434.4249 P: 407.383.4131 A: None			
Florida Public Service Commission	Chief of Safety & Reliability	O: 850.413.6582 P: 850.445.5050 A: None			
Florida Public Service Commission	Director of RCA	O: 850.413.6802 P: 850.320.4809 A: None			

### CONFERENCE LINE

Phone: 866.699.3239

Participant Code: 20089016

"Emergency"



# Energy Resources - Standard Operating Procedures

"Appendix I – Energy Coordinator Contact List"

# REVISION HISTORY

Version	Authority	Action/Description	Date
1.0	Suzanne McCarthy Joey Curry	Information pulled from the body of the Fuel Plan and added as Appendix I	2012.01.05
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Energy Emergency	Origination:	Date: 11/1998	Ву:	P. Elwing
Fuel Shortage Plan	Reviewed/Revised:	4-2003	By:	P. Elwing
(Short - Long-term)	Reviewed/Revised:	4-2004	By:	P. Elwing
	Reviewed/Revised:	1-2005	By:	P. Elwing
	Reviewed/Revised:	6-2007	By:	P. Elwing
	Reviewed/Revised:	10-2007	By:	R. Gilbert
	Reviewed/Revised:	07-07-08	By:	M. Hiestand
	Reviewed/Revised:	09-01-08	By:	M. Hiestand
	Reviewed/Revised:	11-21-08	By:	S. McCarthy
	Reviewed/Revised:	12-05-08	By:	R. Snyder

#### 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 either a short term or 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 short-term or long – term energy emergency caused by a fuel supply shortage in order to maximize capacity or conserve the fuel in short supply.

#### **HI. 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 days, weeks or months, as opposed to hours or minutes for a short-term capacity deficiency.

#### IV. AUTHORITY

#### A. DECLARE EMERGENCY

Activity Person Responsible	
1. Regularly monitor fuel inventories and system load.	Fuels Manager
2. Alert the General Manager to declare an energy emergency any time fuel supplies ap be in jeopardy due to availability of and/or quality constraints and it is probable that in levels will drop below desirable levels, as defined in Section V Step A.	
3. After an energy emergency is declared, or at the direction of the Manager authorized declare an energy emergency, the following procedure will be followed in determining fuel supply situation.	d to Fuels Manager g the
a. Monitor and prepare short-term forecast of system load.	Manager of System Control
b. Monitor and forecast fuel inventories. Coordinate fuel plans with the Florida Munici Power Pool BA.	ipal Fuels Manager
c. Using the above data, run the Generation modeling program and provide the amount each type of fuel expected to be used to the Fuels Manager. The estimated fuel consur	

١	should be established on a daily basis for the first 30 days and then on a weekly basis for up	
	to 75 days.	7. 1. 1. 7.
	d. Using the output of b and c above, prepare and distribute a daily or weekly report on the	Fuels Manager
	overall fuel supply situation	

#### B. ENERGY EMERGENCY COORDINATOR

Activity	Person Responsible
1. After the emergency is declared the Energy Emergency Coordinator is	AGM Energy Production
required to Coordinate all activities involved in Implementing The Energy	Manager of System Control
Emergency Plan.	

# 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 BA.	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	AGM Energy Production
6. Curtail Utility & Municipal use	Manager of System Control
7. Promote load conservation, voluntary and mandatory	Account Managers, Public Information Officer
8. Curtail firm load	Manager of System Control
9. Modify system operation	Manager of System Control

#### V. THE EMERGENCY PLAN

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

<u>Step A</u> – After the Energy Emergency has been declared and the total fuel supply (refers to the fuel on the property and that is already in the delivery "pipeline") has decreased to 30 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
  - Oil Request Lakeland Electric suppliers to locate and acquire any oil of the proper quality to meet both environmental and operational constraints.
  - Coal Attempt to purchase available coal from any sources that meet both environmental and operational constraints.
  - 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

- 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.

#### 4. Communicate with Governmental Organizations

- a. Coordinate with the Public Information Officer in notifying appropriate agencies.
- b. Assist AGM Energy Production with Environmental Restrictions Waiver.

#### 5. Waive Environmental Restrictions

a. 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 burn available fuels that may not meet the environmental constraints.

#### 6. Curtail Utility & Municipal Use

- a. 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
  - 1) 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. Curtail Firm Load No action required.

#### 9. Modify System Operation

- a. Discontinue non-firm sales to utilities not participating in the FRCC Short term or Long term energy plan.
- b. Implement a plan for switching fuels in an effort to minimize the fuel in short supply
- Discontinue sales of economy interchange from units whose fuel is in short supply.

- d. Review the maintenance schedule to optimize use of obtainable fuels.
- e. Coordinate all activities with the Florida Municipal Power Pool BA.

<u>Step B</u> – If the total fuel supply has decreased to the range of 30 to 20 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 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 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%.
  - Discontinue the use of lunchroom kitchens, turn off 25% of exterior lights, turn off hot water heaters.
  - 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 heating 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 those that are 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. Curtail Firm Load No action required.
- 9. Modify System Operation
  - a. Modify unit dispatch to load units with obtainable fuels (other than No. 2 oil) first, and then load units burning the fuel in short supply. Maximize generation output on the units with non limited fuels. Fuel switching should be performed to conserve fuels of limited quantities. Coordinate all activities with the Florida Municipal Pool BA. Implement a plan for switching fuels in an effort to minimize the fuel in short supply.
  - 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.

<u>Step C</u> – When the total fuel supplies have decreased to the range of 20 to 15 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.
  - c. 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
  - 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
  - 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
- 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, 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. Curtail Firm Load No action required.
- 9. 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.

 $\underline{Step\ D}$  – When the total fuel supply has decreased to a 15 to 10 day supply and a continued downward trend is anticipated, the following additional measures should be implemented.

- 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.
- 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. 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 judgment according to circumstances existing at the time of the emergency.
- 16. 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.
- 17. 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. Implement a plan for switching fuels in an effort to minimize the fuel in short supply

<u>Step E</u> – When the total fuel supply has decreased to the area of less than 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. Curtail Firm Load No new action required.
- 9. 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.

# SHORT-TERM / LONG-TERM ENERGY EMERGENCY PLAN-SUMMARY The following shows the additional measures to be taken for each step.

ACTION	30 Days*  Emergency Declared  STEP A	20 to 30 Days STEP B	— 15 to 20 Days — STEP C	10 to 15 Days Less than 10 Days STEP D 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 Fuel Switching as available	Purchase any satisfactory Burnable oil. Purchase any usable coal Purchase maximum amount of additional gas.	— Search for and Purchase any — usuble 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 heating.
3. Promote Load Conservation  Voluntary	Request 5% K.WH reduction. Educate customers. Advertise conservation.	Request 15% KWH reduction.  Adjust thermostats ± 5%.  Cut out indoor & outdoor adv.  Cut out flood lighting as  Possible.	C&1: 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.
4. Mandatory		Ban night sports.  Close lighted parks, etc.  Ban nonessential flood and  O. D. advertising lighting	Ban displays & window lighting Ban in commercial establishments a. A/C and heating during non-use hours and in unoccupied areas. b. Nonessential use of hot water.	Reduce street  and area lighting  where possible.

	30 Days*	22 / 20 7	15 to 20 Days	10 to 15 Days Less the	an 10 Days
	Emergency Declared	20 to 30 Days		STEP D	STEP E
CTION	STEP A	STEP B	STEP C	31BFD	OILI_D
Modify System Operation	Stop non-firm sales		Reduce firm sales to a	Reduce firm sales	Implement
- 1770any system operation	to other utilities.		mim. Use emergency line	to zero.	Orderly shut
	Stop economy interch. sales		ratings. Purchase		Down of units
	• •		<ul> <li>economy power against</li> </ul>		
			peaker prices.	- ·	•
	Review maintenance	Modify unit dispatch.	Purchase short-term firm	Purchase any	Insure power avail to
	Schedule.	Cycle units off-line.	Energy except peaker.	Available	<del>– avan. w</del> – <del>Plants.</del>
	Place 75% of Spin. Res.	Purchase out of state		energy.	<del>- Pidilts.</del>
	On Step "O".	energy.			
				Implement "Firm	
. Curtail Firm Load				Load Curtailment Plan".	
Waive Environmental	Request Governor to				
- Restrictions	suspend SIP of CAA.				
restrictions.	<b>-</b>				
. Comm. With Governmental —	Coordinate with Public	Request legal authority	Same as Step B.	Same as Step B.	Update appropria
Organizations —	Affairs in notifying	for actions to be taken			agencies.
	Appropriate agencies.	In this step.			
	Assist with request to	— Update governmental			
	Governor.	Agencies.			
	T	Issue updated newsletter.	Same as Step B.	Same as Step B.	Update appropria
P. Comm. With Dept. and	Issue newsletter.	Issue apatated newstetter:	Sunte as otop D.		agencies.
City					
0. Comm. With Public and	Issue news release.	Update news release.	Same as Step B.	Same as Step B.	Update appropria
Media — —	Provide daily status				agencies.
1710 QTG	Briefing.				
	Promote load conservation.				

<sup>\*</sup> 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 which is defined as the days supply on our consideration is to be given to the realistic days supply which is defined as the days supply our consideration is to be given to the realistic days supply which is defined as the days supply our consideration is to be given to the realistic days supply which is defined as the days supply our consideration is to be given to the realistic days supply which is defined as the days supply our consideration is to be given to the realistic days supply which is defined as the days supply our consideration is to be given to the realistic days supply which is defined as the days supply our consideration is to be given to the realistic days supply which is defined as the days supply our consideration is defined as the days are days are days as the days are days as the days are days as the days are days

# VI. Detailed Department Plans For Each Step Of Emergency

<u>Step A.</u> - Reduce Utility & Municipal megawatt usage 10% by curtailing all nonessential uses at all utility and City owned facilities. Some measures to be taken are:

- 1. Building Services
  - 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.
- 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.
- Discontinue the use of air conditioning units servicing large areas with a small number of people.
   This will involve the moving of some personnel.

<u>Step D</u> - Eliminate all but critical air conditioning and heating, i.e., communication and computer facilities.

# A. COMMERCIAL/INDUSTRIAL POWER SERVICES

Upon the declaration of an 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 an 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

- 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
  - 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.
  - 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 AGM Technical Services will be responsible for the following actions:

<u>Step A</u> — 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;
- 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;
- 4. 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 an energy emergency the Manager 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.

<u>Step D</u> – As a last resort 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 judgment 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 an 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.
- 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.
- 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 an energy emergency, Public Information Officer will be responsible for the following actions:

Step A

- 1. 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 Affairs 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

- 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

- 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. ENGINERING DIVISION AND MARKETING GROUP

Upon the declaration of an energy emergency, 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

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

#### H. ENERGY SUPPLY / POWER PRODUCTION GROUP

Upon the declaration of an 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

1. Proceed with orderly shutdown of units as fuel is exhausted.

#### I. PUBLIC AFFAIRS

Upon the declaration of an energy emergency, the 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
- 3. 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.
  - Continue advertising that explains why rotating blackouts are occurring. Continue conservation ads.

#### J. SYSTEM OPERATION

Upon the declaration of an 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.

- 2. 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.
- 3. Discontinue non-firm sales to utilities not participating in the FRCC Long-term Energy Emergency Plan.
- 4. Discontinue sales of Economy Interchange from units whose fuel is in short supply.
- 5. 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. Maximize generation output on the units with non limited fuels. Fuel switching should be performed to conserve fuels of limited quantities. Coordinate all activities with the Florida Municipal Pool BA.

#### Step C

- 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.

# **ENERGY EMERGENCY CONTACT LIST**

	TITLE	ENTITY	
	State Warning Point	DCA Division of	Office: 850 413 9900, 850 413 9910, 850
		Emergency	413-9911
		Management	Fax: 850-488-7841
Sarah Rogers	President & CEO	Florida Regional	Office: 813-289-5644
-	[	Coordinating	
		Council	
Linda Campbell	Vice President	Florida Regional	Office: 813-289-5644
	Executive Director	Coordinating	1
	l	Council	
Marty Mennes	Chair FRCC Operating	Florida Power and	Office: 305-442-5674
	Committee	Light	
FRCC RC	State Capacity	Florida Power and	Office: 305-442-5022
	Emergency Coordinator	Light	
	Polk County	Polk county	Office: 863-533-1161
	Administrator		
	Polk County	Polk County	Office: 863 533-1161
	Commission, Chairman	,	
	Dept. of Environmental	State of Florida	Office: 904-488-2986
	Regulation		
-	Mayor	Polk City	Office: 863-984-1375
<del></del>	Emergency Coordinator	Florida Public	Office: 850-413-6696
		Service	
		Commission	

Document Update			
Name	Action	Date	
S. McCarthy	Title Change	11-21-08	
R. Snyder	"errata"	12-05-08	

# TAMPA ELECTRIC COMPANY

# LONG-TERM ENERGY EMERGENCY PLAN

**FOR** 

**FUEL SUPPLY SHORTAGE** 

EFFECTIVE DATE: 01/01/2012

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- ATTACHMENTS

  Attachment I Long-term Energy Emergency Plan

  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. This document, the *Tampa Electric Company Long-Term Energy Emergency Plan For Fuel Supply Shortage* (hereafter referred to as the "Fuel Shortage Plan"), contains the procedures the Company has established to enable it to best cope with the energy shortage, and protect the health, safety and welfare of its customers during the period of deficiency.

#### II. PURPOSE

The purpose of the Fuel Shortage 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 that affects TEC. However, understanding that the Governor of the State of Florida has the authority to declare a fuel supply shortage for the entire state, TEC would also work with the applicable governmental agencies and/or organizations in an effort to comply with the Governor's declaration.

#### 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. A long-term 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 a long-term energy emergency is usually measured in terms of weeks or months, as opposed to a day, hours or minutes for a short-term capacity deficiency. The Fuel Shortage Plan addresses contingencies for fuel shortages with no clear resolution when total system inventory levels drop below 10, 15, 25, 35 and 45 days of fuel remaining.

#### IV. AUTHORITY

This portion of the Fuel Shortage Plan identifies TEC personnel responsible for overseeing and implementing specific actions during a long-term energy emergency. However, during such times, the responsible personnel may delegate a specific task to other capable TEC personnel as necessary. The reasons for delegating responsibility include continuing the implementation of the plan during the absence of the responsible personnel and increasing the effectiveness and efficiency of plan implementation.

#### A. EMERGENCY DECLARATION

#### Activity

- Increase fuel inventory and system load monitoring (as appropriate) and make periodic fuel inventory projections available to applicable departments.
- 2. Alert the Vice President of Fuels Management any time a key fuel supply appears to be in jeopardy due to fuel availability and/or quality constraints, and it is probable that inventory levels will drop below desirable levels

If a long-term energy emergency needs to be declared, this officer will notify the President of TEC to announce the declaration.

- After a long-term energy emergency is declared, or at the direction of the Vice President of Fuels Management, the following procedure will be followed in determining the fuel supply situation and inventory plan.
  - Monitor and prepare shortterm forecast of system load.
  - b. Monitor and forecast fuel inventories (including

<u>Position Responsible</u>

Managing Director - Fuels

Managing Director - Fuels

Energy Control Center Director

Managing Director - Fuels

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Activity reasonable delays or delivery problems).

- c. Using the above data, run the company's resource commitment program and provide the amount of each type of fuel expected to be used to the Fuels Management 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 to key departments, areas and personnel (e.g., Grid Operations, the plants, TEC officers).
- 4. Declare a long-term energy emergency when necessary and notify the Chairman of the Florida Reliability Coordinating Council ("FRCC") Reliability Assessment Group about the energy emergency. Also,
  - Declare when to move to each step in the Fuel Shortage Plan
  - Implement all or any part of the Fuel Shortage Plan in cooperation with the FRCC
  - Implement the Fuel Supply Shortage Element of the Florida Electrical Emergency

Position Responsible

Resource Planning and Operations Planning Director

Managing Director - Fuels

President of TEC or by delegation to:

Customer Care and Fuels Management Vice President

Energy Delivery
Operations Vice President

# Position Responsible

Activity
Contingency Plan upon the declaration of an Emergency Alert by the Florida Public Service Commission or upon the declaration of any long-term energy emergency by the Governor of the State of Florida

 Declare and notify the appropriate organizations and/or agencies (e.g., FRCC) when the long-term energy emergency is over

# B. ENERGY EMERGENCY COORDINATOR

#### Activity

1. After the long-term energy emergency is declared, the Energy Emergency Coordinator is required to coordinate all activities involved in implementing the Fuel Shortage Plan.

Position Responsible
Energy Control Center
Director

# C. IMPLEMENTATION - ACTIVITIES AND RESPONSIBILITIES

The individuals below will assist the Energy Emergency Coordinator and be responsible for implementing the identified Fuel Shortage Plan activity.

1.	Active Expedite fuel pro		ent	Position Responsible Managing Director - Fuels
1A	Expedite coal tra	ansporta	ation	Managing Director - Fuels
2.	Communicate employees	with	TEC	Corporate Communication Director

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3.	Activity Communicate with media and public	Position Responsible TEC Public Information Officer
4.	Communicate with governmental organizations	Regulatory Affairs Director
5.	Purchase power and control sales	Managing Director – Fuels and Customer Service Directors
6.	Obtain approval to waive/modify environmental restrictions	Environmental, Health & Safety Director
7.	Curtail TEC energy use	Corporate Services Vice President, Energy Supply Operations Vice President, and Energy Delivery Vice President
8.	Promote load conservation (voluntary and mandatory)	Customer Service Directors & Corporate Communication Director
9.	Utilize load control	Energy Control Center Director
10.	Curtail customer load	Energy Control Center Director
11.	Modify system operations	Energy Control Center Director

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

# V. IMPLEMENTATION - SPECIFIC STEPS AND ACTIONS

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

# A. STEP A

After a long-term energy emergency has been declared and the total system fuel inventory has decreased to 45 days and a continued

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downward trend is anticipated, the following measures should be implemented and continued for the duration of the emergency.

# 1. Expedite fuel procurement:

- a. Oil Procure available oil from sources that meet both environmental and operational constraints.
- b. Coal Procure available coal from 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 coal transportation:

Establish priorities with transportation companies to ensure prompt delivery of TEC coal in adequate quantities. Allocate coal deliveries among available transportation modes. Also, when required, assist the transportation companies in obtaining ample supplies of diesel fuel and other petroleum products to operate vessels, locomotives, vehicles, and other equipment used in the process of delivering coal to TEC.

# 2. Communicate with TEC employees:

- a. Issue internal newsletter/bulletin that explains why the fuel shortage has occurred, provides an overview of the Fuel Shortage Plan and communicates details of Step A.
- b. Use appropriate internal communication platforms (e.g., electronic mail and/or bulletins) to provide updates to employees as needed.

#### 3. Communicate with Public and Media

a. Notify officers and key departments (e.g., Customer Service, Fuels Management, and Regulatory) that TEC will contact the public and media, if the total system fuel supply decreases to 35 days and a continued downward trend is anticipated.

# 4. Communicate with governmental organizations:

a. Notify appropriate agencies.

- 5. Wholesale power sales and purchases:
  - Discontinue non-firm sales.
- 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.
  - b. Mandatory No action required.
- 9. Utilize Demand Side Management:

Utilize demand side management as needed to reduce system demand on peak periods and optimize the use of TEC's base load generating units.

- 10. Curtail customer load No action required.
- 11. Modify system operations:
  - a. Minimize the amount of spinning reserve while maintaining Operating Reserves. Review the maintenance schedule to optimize use of obtainable fuels. Review should account for preparation of plants for extreme weather conditions.

# B. STEP B

If the total system 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 . Procure available oil from sources that meet both environmental and operational constraints. Investigate any and all possible source of oil. Maximize onsite inventory.
  - b. Coal Procure 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, and maximize natural gas storage capacity.
  - d. Develop plans for any physical transfers of fuel that would be practical.
  - e. Continue inventory tracking, forecasting and reporting.
- 1A. Expedite coal transportation:
  - a. Communicate with all transportation providers to review priorities to assure prompt delivery of fuel. Review allocation of coal among available transportation modes.
- 2. Communicate with TEC employees:
  - a. Issue updated emergency information to employees.
- 3. Communicate with public and media:
  - a. Issue news release to the news media, explaining why the fuel shortage has occurred, describing actions TEC is taking to deal with the problem, and providing specific conservation information the news media should convey to customers.
  - b. Provide daily briefings to media on status of emergency.
  - c. Promote load conservation by the public via advertisements that provide customers with specific information on 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 power suppliers (e.g., cogenerators, utilities and power marketers) to request maximum output and availability, arrange non-emergency power purchases to both serve load and operating reserves, reserving applicable electric transmission service(s) and tagging transactions as necessary.
  - b. Contact all firm wholesale customers and request voluntary 15% load reduction.
- 6. 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, and turn off non-essential hot water heaters.
  - c. Reset and lock heating and air conditioning thermostats to 65° and 80°, respectively.
- 8. Promote load conservation:
  - a. Voluntary:
    - (1) Request that residential and commercial customers cut back on energy usage and adjust thermostat settings 5 degrees cooler than normal during a heating season and 5 degrees warmer than 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) Request a governmental ban on 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.
- Utilize Demand Side Management:
  - a. Utilize demand side management as needed to reduce system demand on peak periods and optimize the use of TEC's base load generating units.
- 10. Curtail customer load No action required.
- 11. Modify system operations:
  - a. Modify unit dispatch to load units with obtainable fuels first, and then load units that burn the fuel in short supply.
  - b. Where possible, cycle units fueled by short supply 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 procure any oil available that would satisfactorily burn in TEC power plants.
  - b. Coal Locate and procure any usable coal.
  - c. Natural gas Continue procuring additional gas supply from TEC suppliers and/or other utilities in the state, requesting additional transportation from upstream pipelines and other pipeline customers, if needed, and maximizing natural gas storage capacity.
  - d. Implement physical transfers of fuel that is necessary and practical.
  - e. Continue inventory tracking, forecasting and reporting.
- 1A. Expedite coal transportation:

- a. Communicate with all transportation providers to review priorities to assure prompt delivery. Review allocation of coal among available transportation modes.
- 2. Communicate with TEC employees:
  - a. Issue updated emergency information 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 and operating reserves, reserving applicable electric transmission service(s) and tagging transaction(s) as necessary.
  - 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.
- Curtail TEC energy use:
  - a. Discontinue the use of heating and 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) Request residential customers 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) Request conditioned offices and buildings (other than critical services such as hospitals) to lower thermostat settings to 65° during the heating season and raise thermostat settings to 80° during cooling season.
- (3) Request commercial establishments, institutional facilities, public and private schools, office buildings and industrial plants 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 non-essential use of hot water.
- (2) Elimination of window and display lighting.
- (3) Ban all heating and air conditioning during non-use hours and in unoccupied areas of commercial establishments.

# 9. Utilize Demand Side Management:

- a. Utilize demand side management as needed to reduce system demand on peak periods and optimize the use of TEC's base load generating units.
- b. Implement Voltage Control (Beckwith option) as needed to reduce system demand at peak periods. Facilities that have been identified as critical to public health and safety by governmental agencies will be exempt from Voltage Control.
- 10. Curtail customer load No action required.

# 11. Modify system operations:

a. Implement emergency line ratings so as to increase import capability.

#### D. STEP D

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 updated information to employees emphasizing 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 non-emergency power, reserving applicable electric transmission service(s) and tagging transaction(s) as necessary.
  - 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.

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#### 7. Curtail TEC energy use:

a. Eliminate all but critical heating and air conditioning 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 as necessary.

#### 9. Utilize Demand Side Management:

- Utilize demand side management as needed to reduce system demand at peak periods and optimize the use of TEC's base load generating units.
- b. Implement Voltage Control (Beckwith option) as needed to reduce system demand at peak periods. Facilities that have been identified as critical to public health and safety by governmental agencies will be exempt from Voltage Control.
- 10. Curtail customer load No action required.
- 11. Modify system operations No new action required.

#### 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.
- Communicate with TEC employees:
  - a. Issue updated emergency information to employee.

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- 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, reserving applicable electric transmission service(s) and tagging transaction(s) as necessary.
- 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 Demand Side Management Same as Step D.
- 10. Curtail customer load:

Implementation of firm load curtailment will be considered only after all other means have been considered. Other means include Demand Side Management, purchasing of emergency power, assistance from other neighboring utilities, and the assistance of the FRCC Reliability Coordinator.

The implementation of this step will result in the interruption of electrical service to our customers on a rotating basis. Please refer to The <u>Tampa Electric Firm-Load Curtailment Plan</u> which will be followed when customer load curtailment is being considered. Interruption of electrical service will be rotated among groups of customers (distribution circuits) so that no one area will be without electricity for an unduly long period of time.

Per the <u>Tampa Electric Firm-Load Curtailment Plan</u>, priority of service is given to those facilities that have been identified as critical to public health and safety by governmental agencies.

Application of load curtailments 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.

#### 11. Modify system operations:

- a. Implement plans to ensure the orderly shutdown 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 (e.g., via face-to-face meeting or in writing) to conserve electricity within the workplace. This is in addition to informational releases by Corporate Communications.

- 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 water heaters.
  - d. The Facility Service Department will reset and lock all heating and air conditioning thermostats to 65° and 80°, 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 heating and air conditioning units servicing large areas with a small number of people. This may involve relocating personnel.
- 4. Step D Eliminate all heating and air conditioning except for critical systems such as microwave and computer facilities.

#### B. CUSTOMER SERVICE

Upon declaration of a long-term energy emergency, the Customer Care Department, with the cooperation of Energy Management Services and the Account Management department, will be responsible for the steps listed below. In working to implement these steps, each department will also take into consideration the general social and economic well being of the TEC service area, as well as community and governmental response. These steps will occur with close coordination and collaboration with the Energy Supply Resource Planning and Grid Operations Teams.

- Step A Customer Service account managers will contact all key assigned commercial and industrial customers (including interruptible & cogenerator accounts) and advise them of the fuel shortage and provide them information on potential ways to reduce their energy usage.
- Step B The Customer Service account managers will contact all key assigned commercial/industrial customers (including interruptible and cogenerator accounts) and advise them the fuel supply has diminished to a point which makes it necessary to request a further curtailment of 5% of their load until further notice. Also, the account managers will advise customers of the specific conservation measures that should be taken as stated in Section VI. C.
- 3. Step C The Customer Service account managers will contact all key assigned commercial/industrial customers (including interruptible and cogenerator accounts) 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, the account managers will advise customers of the specific conservation measures that should be taken as stated in Section VI. C.
- 4. Step D The Customer Service account managers will contact all key assigned commercial and industrial customers (including interruptible and cogenerator accounts 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, the account managers will advise customers of the specific conservation measures that should be taken as stated in Section VI. C.
- 5. Step E The Customer Service account managers will contact all key 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. Account managers advise interruptible load customers of impending curtailment of service. Commercial and industrial

customers are also advised of the specific conservation measures that should be taken as stated in Section VI.C.

- 6. Step F The Customer Service account managers will contact all key assigned commercial and industrial customers (including interruptible load customers) and advise them of the continued need to maintain all load curtailment action until further notice.
- 6. Step G As needed, both Customer Service Directors will change phone/call center scripts to inform customers of this issue, as Tampa Electric Company may decide to cease normal business operation.

Note: In all steps, the Customer Service will:

- a. Maintain communications with each interruptible & cogenerator 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 & cogenerator 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 Customer Care, Energy Management Services, Account Management and the Business & Industry Team will be responsible for the steps listed below. In working to implement these steps, each department will also take into consideration 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.
  - b. Mandatory measures No action required.
- 2. Step B Promote load conservation:

#### a. Voluntary measures:

- (1) Work with Corporate Communications and 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 those items that are 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 Fuel Shortage Plan is working.

#### b. Mandatory measures:

- (1) Request for a governmental ban on all nighttime sporting activities, including closure of all lighted parks, tennis courts, golf courses, etc.
- (2) Request the public to: 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 TEC'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 non-essential 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 Fuel Shortage 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 (Request from the public):
  - (1) Eliminate window and display lighting.
  - (2) Ban heating and air conditioning during non-use hours.
  - (3) Ban heating and air conditioning 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) Continue observance of previous steps.
  - 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 Residential:
    - (1) Announce to the public that the electric supply continues to deteriorate and that TEC'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. Mandatory measures:
    - (1) No new action required.

#### D. ENVIRONMENTAL, HEALTH & SAFETY

Upon the declaration of a long-term energy emergency the Environmental, Health & Safety Department will be responsible for the following actions:

Step A – Initiate procedure to petition the Governor. 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:

- The nature and extent of the long-term energy emergency;
- b. Current and projected unemployment impacts associated

with the long-term energy emergency;

- Current and projected loss of necessary energy supplies for residential use associated with the long-term 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.
- h. 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 Washington, U.S. EPA Region IV, and Environmental Protection Commission of Hillsborough County.

#### E. FUELS MANAGEMENT

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

- During Steps A-E, Fuels Management will focus on the previously stated activities to expedite the procurement of coal, oil and natural gas. These activities require Fuels Management to:
  - a. 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.
  - b. Monitor fuel market conditions and assess future trends. Report market information to management.

- c. 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.
- d. 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.
- e. Manage existing fuel inventories in a way that assures the most efficient use of fuels under the constraints caused by the fuel emergency.
- f. Provide fuel and transportation availability information for planning and control of operations under the fuel emergency conditions.
- g. Investigate the feasibility of physical transfers of fuel. 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.
- h. Develop information, reports, and testimony relating to TEC's fuel procurement activities during the long-term energy emergency, including documentation of instances where fuel stocks and/or deliveries were shared with other entities.

#### F. 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 of Energy Supply with governmental contact to waive/modify environmental restrictions.
- c. Notify selected public officials of the long-term energy emergency. Relate message developed in subpart 1a above. Advise of TEC Fuel Shortage 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.

#### Step C

- a. Contact local state and federal agencies to implement Step 7.b. curtailment of heating and air conditioning, nonessential 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. Advise public officials of customer load curtailment and its potential impact on their activities.
- b. Communicate all notices to governmental organizations.

## G. ENERGY & GAS DELIVERY TRANSMISSION ENGINEERING & OPERATIONS

Upon the declaration of a long-term energy emergency, the Energy & Gas Delivery Transmission Engineering and Operations 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 to allow maximum power transfer capability to TEC.

#### H. 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 heating and 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 be made if worsening situations dictate.

#### 2. Step B

- a. With critical review of lighting and plant operations, continue elimination and reduction of unnecessary lighting, heating, and air conditioning.
- b. Reset required heating and air conditioning thermostats to 65° and 80°, 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 heating and air conditioning 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.

#### I. 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 an internal newsletter or electronic message and/or bulletin that explain why the fuel shortage has occurred, provides an overview of the Fuel Shortage Plan and communicates details.
  - (2) Provide updated emergency information as needed.
- 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

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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

- Communicate with TEC employees.
  - (1) Provide updated emergency information as needed.
- 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.

#### 3. Step C

- a. Communicate with TEC employees.
  - (1) Provide updated emergency information as needed.
- 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) Provide updated emergency information as needed.
- 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.

#### 5. Step E

- a. Communicate with TEC employees.
  - (1) Issue emergency information emphasizing that most customers will experience rotating blackouts and why they will occur.
- b. Communicate with public and news media.
  - (1) Issue news statement to explain the continued downward trend in fuel supply. 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.

#### J. WHOLESALE MARKETING

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

1. Step A

a. Cut all non-firm sales to wholesale customers.

#### 2. Step B

- a. Contact utilities and power marketers regarding firm and non-firm power purchases. Request co-generators and wholesale power suppliers to maximize their output and availability. Coordinate with Grid Operations and Operations Planning concerning power purchase needs. Make appropriate power purchases from resources available in the wholesale market, reserving the applicable transmission service(s) and tagging the transaction(s), as necessary.
- 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 Operations Planning, reserving the applicable transmission service(s) and tagging the transaction(s) as necessary.
- 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 non-emergency power. Coordinate purchases with Grid Operations and Operations Planning, reserving the applicable transmission service(s) and tagging the transaction(s) as necessary.
- 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 Operations Planning. Reserve available transmission service(s) to bring those purchase(s) into the TEC system, and tag the transaction(s).

#### K. 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 Demand Side Management Utilize demand side management as needed to reduce system demand at peak periods and optimize the use of TEC's base load generating units.
- b. Provide the Energy Emergency Coordinator with a short-term demand and energy forecast during the emergency.
- c. Provide Operations Planning an hourly load profile for the first 30 days and weekly peaks up to 75 days.
- d. Minimize the amount of spinning reserve while maintaining Operating Reserves.
- e. Review maintenance schedule to optimize obtainable fuels.
- f. Notify the State Capacity Emergency Coordinator of public appeals for conservation.

#### 2. Step B

- a. Utilize Demand Side Management Utilize demand side management as needed to reduce system demand at peak periods and optimize the use of TEC's base load generating units.
- b. Modify unit dispatch to add units with obtainable fuels 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 Demand Side Management Utilize demand side management as needed to reduce system demand at peak periods and optimize the use of TEC's base load generating units.
- b. Implement emergency line ratings so as to increase import capability.
- c. As needed direct System Service to implement Voltage Control.

#### 4. Step D

- a. Utilize Demand Side Management Utilize demand side management as needed to reduce system demand at peak periods and optimize the use of TEC's base load generating units.
- b. As needed direct System Service to implement Voltage Control.
- c. Implement plans to ensure the orderly shutdown of all units burning the fuel in short supply in the event fuel is exhausted.
- d. Implement plans to ensure power availability to all power plants and fuel handling facilities.

#### 5. Step E

- a. Continue as Step D.
- b. Implement firm load curtailment if needed.

#### L. OPERATIONS PLANNING

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

#### 1. Step A

a. Run the resource commitment program and provide the projected fuel burn (by fuel type) to the Fuels Management 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.

#### 2. Step B

- a. Modify unit dispatch to add units with obtainable fuels 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.

#### **Version History**

Date	Version Number	Summary of Change	Reason for Change	Changed By
1/18/2010	2010A	Yearly review	Update document with organizational changes	Andrew Kennedy
1/21/2011	2011A	Yearly review	Update document with organizational changes	Andrew Kennedy
10/10/2011	2012A	Yearly review	Update document	Andrew Kennedy

### LONG-TERM ENERGY EMERGENCY PLAN SUMMARY

	ACTION	45 Days* Emergency Declared STEP A	35 Days STEP B	25 Days STEP C	15 Days STEP D	10 Days STEP E
1.	Expedite Fuel: Oil	Purchase any proper oil	Determine types of oil available.	Purchase any satisfactory burnable oil	Search for and purchase any usable fuel.	
	Coal	Purchase any proper coal. Expedite coal transportation.	Purchase any satisfactory burnable coal. Plan fuel transfers.		William Control of the Control of th	
	Natural Gas	Purchase additional gas and transportation.	Purchase additional gas and transportation. Maximize gas storage.			
2.	Communicate With TEC Employees	Use appropriate internal communication platforms (e.g., electronic mail and/or bulletins) to provide updates to employees as needed.				
3.	Communicate With Public and Media	Notify officers and key departments about plans to contact the public and media, if the total fuel supply continues to decrease in Step B.	Issue news release. Provide daily status briefing. Promote load conservation.			
4.	Communicate With Governmental Organizations	Coordinate with Corporate Communications in notifying appropriate	Request legal authority for actions such as waive/modify environmental			

#### LONG-TERM ENERGY EMERGENCY PLAN SUMMARY

	ACTION	45 Days* Emergency Declared STEP A	35 Days STEP B	25 Days STEP C	15 Days STEP D	10 Days STEP E
		agencies.	restrictions, to be taken in this step. Update governmental agencies.			
<b>5</b> :	Wholesale Market Power Sales and Purchases	Stop non-firm sales to wholesale customers.	Arrange non-emergency power purchases, reserve transmission services and tag transaction(s):  Request maximum output and availability from cogenerators and wholesale power purchases.  Request voluntary 15% KWH 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 KWH 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% KWH 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.
6.	Waive/Modify Environmental Restrictions	Request to Governor to suspend SIP of CAA.				
<b>7.</b>	Curtail TEC Energy Use: Offices and Operation Center	Curtail non-essential energy uses. Reduce KWH's by 10%. Monitor usage weekly.	Reduce KWH's BY 20%. Set thermostats to 65° for heating and to 80° for cooling. Cut off 25% of exterior lights. Cut off hot	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.	

#### LONG-TERM ENERGY EMERGENCY PLAN SUMMARY

	ACTION	45 Days* Emergency Declared STEP A	35 Days STEP B	25 Days STEP C	15 Days STEP D	10 Days STEP E
			water heaters.			
8.	Promote Load Conservation: Voluntary	Educate customers. Advertise conservation.	Request 15% KWH reduction. Adjust thermostat settings +/-5°, depending on the season. Cut out indoor & outdoor advertising lights. Cut out flood lighting as possible.	Commercial & Industrial: Request 30% KWH reduction. 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.	Commercial & Industrial: Request 50% KWH reduction.	
	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. Discontinue service to interruptible customers as necessary.	
9.	Utilize Demand Side Management	Implement as needed.	Implement as needed.	Implement as needed.	Implement as needed.	Implement as needed.
10	. Curtail Customer					Implement TEC

Version 2012A - October 10, 2011

#### LONG-TERM ENERGY EMERGENCY PLAN SUMMARY

	ACTION	45 Days* Emergency Declared STEP A	35 Days STEP B	25 Days STEP C	15 Days STEP D	10 Days STEP E
	Load					Firm-Load Curtailment plan if needed.
<b>11.</b>	Modify System Operations	Review maintenance schedule to optimize use of available fuel. Minimize spinning reserve while maintaining Operating Reserves.			ratings	Implement orderly shutdown of units as required. Ensure power available to plants.

<sup>\*</sup>Refers to total fuel deliverable through supply chain. 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 seq.</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 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 natural gas 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 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 ismegawatts.  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**

Ba	sed 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
	By:

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January 31, 2012

Ann Cole, Commission Clerk Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850

Subject:

Docket No. 110316-EM

Dear Ms. Cole:

In accordance with Rule 25-6.0185, Florida Administrative Code, Seminole Electric Cooperative, Inc. hereby submits both a clean and a type-and-strike copy of our revised Long-Term Fuel Emergency Plan. Other than some formatting revisions, the only changes from our last Emergency Plan filing in 2009 are 1) to revise some of the position titles due to internal reorganization and 2) to reflect changes in Seminole's Member's General Managers.

Please do not hesitate to call me if you have any questions or comments. I can be contacted at (813) 739-1234 or by e-mail at <a href="mailto:jreid@seminole-electric.com">jreid@seminole-electric.com</a>.

Sincerely

Wrn. Jack Reid

Director of Fuel Supply

cc:

T. Woodbury

M. Sherman

J. Frauen

D. Gerhart

S. Wallace

C. Wubbena

#### SEMINOLE ELECTRIC COOPERATIVE, INC.

#### AND

# MEMBER COOPERATIVES LONG-TERM FUEL EMERGENCY PLAN REVISED

January 2012

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

#### INTRODUCTION

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 Electric Cooperative, Inc. (Seminole) system or in the event of a Florida Fuel Supply Emergency.

To this end, the procedures described herein will establish steps to be taken by Seminole and its member cooperatives (listed in Appendix A) to ascertain the existence of a fuel emergency and to respond to it. Furthermore, this procedure establishes steps to be taken by Seminole and its member cooperatives in an effort to cooperate fully with the Florida Reliability Coordinating Council (FRCC) Fuel Supply Shortage Element dated November 1998 and the FRCC Generating Capacity Shortage Plan (currently as adopted) in the event of a Florida Fuel Supply Emergency.

Seminole and its member cooperatives have a unique relationship that must be recognized in the development and implementation of this emergency plan. As the power supplier, Seminole has the responsibility of fuel supply, power generation, and wholesale purchases, while the member cooperatives have all responsibility for serving retail customers. In subscribing to this plan, Seminole and its member cooperatives 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 Rule 25-6.0185, Florida Administrative Code, each Florida electric utility must have a Long-Term Energy Emergency Plan on file with the Florida Public Service Commission (FPSC). This plan is to establish a systematic and effective means of anticipating, assessing, and responding to a long-term emergency caused by a fuel supply shortage.

This plan was first required on January 31, 1999 and is to be reviewed every three (3) years. If the 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 to the FPSC for approval and to the FRCC for information purposes.

## SEMINOLE ELECTRIC COOPERATIVE, INC. AND MEMBER COOPERATIVES

#### LONG-TERM FUEL EMERGENCY PLAN

#### I. PURPOSE

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. Fossil fuels that are covered by this plan are coal, petroleum coke, natural gas, and diesel fuel oil.

#### II <u>FACILITIES</u>

Coal is the primary fuel presently utilized by Seminole and its member cooperatives at the Seminole Generating Station at Palatka, Florida. Petroleum coke and fuel oil are also used at times at this facility. In addition to coal and petroleum coke, Seminole uses natural gas as a fuel source for its Midulla Generating Station in Hardee County, as well as for several facilities under purchase power agreements. Most of these facilities also use fuel oil as a backup fuel when natural gas is not available. All four fuels will be addressed in this plan. Nuclear fuel is utilized in Crystal River Unit No. 3, where Seminole owns a 1.6994 percent (15 megawatt) share. However, nuclear fuel supply is the responsibility of Progress Energy Florida and, therefore, is not included in this plan.

#### III. <u>DEFINITION</u>

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 and its member cooperatives at the Seminole Generating Station. Coal is sourced from various coal regions in Illinois, Indiana, Kentucky, Virginia, West 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

To mitigate risks due to supply, transportation, and unloading interruptions, the plan is to maintain an annual average of 50 days or more of solid fuel in inventory.

#### **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 is 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 fuel supply to the generating plant 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 and its member cooperatives. No.2 diesel fuel oil is a flame stabilizing fuel and startup fuel presently utilized at the Seminole Generating Station. For the Midulla Generating Station 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 for the Midulla Generating Station will be 50 to 100 hours burn for full load operation. For the purchase power 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. No fuel oil is available at the Calpine Osprey facility, but the facility has firm natural gas transportation capacity.

#### 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**

The fuel inventory level at which an emergency condition is considered to exist is 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 and its member cooperatives for the Midulla Generating Station 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 existing pipelines if storage capacity is available.

Seminole has 570,000 Dth of natural gas storage available for May through October. This storage will facilitate re-supply of natural gas interrupted due to hurricanes in the Gulf of Mexico.

#### 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 III, the Director of Fuel Supply will report such findings to the Sr. Director of System Operations and Seminole's senior management for further action.

#### VIII. ALTERNATE FUEL SOURCES

Seminole's CEO & General Manager or his designee 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 Sr. 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.

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

#### IX. PURCHASED POWER

The Sr. Director of System Operations shall authorize the Manager of

Control Center Operations to investigate potential sources of supplemental purchased power. The Operations Department will communicate directly with the Fuel and Marketing Division 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 Sr. Director of System Operations will so notify the CEO & General Manager and Vice President of Energy Delivery. 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.

#### 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 of Energy Delivery, the CEO & General Manager and the Member System Managers, the Sr. Director of System Operations will notify the State Capacity Emergency Coordinator and the Chairman of the FRCC Operating Subcommittee as required. Such notification will be in accordance with Section V of the FRCC Generating Capacity Shortage and/or Florida Electrical Emergency Contingency Plan's, Fuel Supply Shortage Element for the purpose of requesting initiation of a Fuel Supply Alert.

In addition, the Sr. Director of System Operations will immediately initiate actions as described in the following section.

#### XI. CHRONOLOGY OF CONSERVATION MEASURES

The Sr. Director of System Operations, after consultation with the Vice President of Energy Delivery and the CEO & 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 Sr. Director of System Operations and, upon consultation with the Vice President of Energy Delivery, Vice President of Fuels and Marketing and the CEO & General Manager, it will be the responsibility of the Sr. 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 ongoing 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 Sr. Director of Operations will authorize the Manager of Control Center Operations or his designee 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 off-specification 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 that 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 Sr. Director of System Operations will request that Environmental Affairs begin investigations into possible emergency permit revisions that 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 Sr. Director of System Operations and, upon consultation with the Vice President of Energy Delivery, Vice President of Fuels and Marketing and the CEO & General Manager, it will be the responsibility of the Sr. 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 Sr. Director of Operations will direct the Manager of Control Center Operations or his designee to take any further action toward optimization of the fuel in short supply. At the discretion of the Sr. Director of Operations, the Manager of Control Center Operations or his designee 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 judgment 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 that 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 Sr. Director of System Operations will recommend a plan of action to the appropriate Vice President or his designee, 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 Sr. Director of System Operations and, upon consultation with the . Vice President of Energy Deliver, Vice President of Fuels and Marketing and CEO & General Manager, it will be the responsibility of the Sr. 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 lowest 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 as 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 Sr. 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 level and are anticipated to continue an uncontrolled decline, he will immediately inform the Sr. Director of System Operations, and upon consultation with the Vice President of Energy Delivery, . Vice President of Fuels and Marketing, CEO & General Manager, and all Member System Managers, it will be the responsibility of the Sr. 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)

The Sr. Director of Operations will consult with the Director of Fuel Supply, Manager of Operations Control Center, and others, as required, to determine the most prudent level of continued service.

3. 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.

#### APPENDIX A

It is the intent of Seminole 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 this will be implemented under the direction of the FRCC through Seminole's Sr. Director of Operations. The persons responsible for the actions of individual participants in this plan are listed below:

Mr. Mike Campbell	Central Florida Electric Cooperative, Inc.
Mr. Richard K. Davis	Clay Electric Cooperative, Inc.
Mr. Jeffery R. Brewington	Glades Electric Cooperative, Inc.
Mr. Dennie Hamilton	Lee County Electric Cooperative, Inc.
Mr. Wm. T. Mulcay, Jr. Peace River Electric Cooperative, Inc.	
Mr. James P. Duncan Sumter Electric Cooperative, Inc.	
Mr. John Martz	Suwannee Valley Electric Cooperative, Inc.
Mr. Tracy A. Bensley	Talquin Electric Cooperative, Inc.
Mr. Julius Hackett	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 that is essential to the health, safety, or welfare of the community should be considered and, <u>insofar as the situation 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

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 immediate 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 that make special provisions for the needs of those with life-sustaining medical equipment.

# SEMINOLE ELECTRIC COOPERATIVE, INC.

AND

#### MEMBER COOPERATIVES

# LONG-TERM FUEL EMERGENCY PLAN

REVISED

January 2012 Deleted: 2009

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

#### INTRODUCTION

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 Electric Cooperative, Inc. (Seminole) system or in the event of a Florida Fuel Supply Emergency.

To this end, the procedures described herein will establish steps to be taken by Seminole and its member cooperatives (listed in Appendix A) to ascertain the existence of a fuel emergency and to respond to it. Furthermore, this procedure establishes steps to be taken by Seminole and its member cooperatives in an effort to cooperate fully with the Florida Reliability Coordinating Council (FRCC) Fuel Supply Shortage Element dated November 1998 and the FRCC Generating Capacity Shortage Plan (currently as adopted) in the event of a Florida Fuel Supply Emergency.

Seminole and its member cooperatives have a unique relationship that must be recognized in the development and implementation of this emergency plan. As the power supplier, Seminole has the responsibility of fuel supply, power generation, and wholesale purchases, while the member cooperatives have all responsibility for serving retail customers. In subscribing to this plan, Seminole and its member cooperatives 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 Rule 25-6.0185, Florida Administrative Code, each Florida electric utility must have a Long-Term Energy Emergency Plan on file with the Florida Public Service Commission (FPSC). This plan is to establish a systematic and effective means of anticipating, assessing, and responding to a long-term emergency caused by a fuel supply shortage.

This plan was first required on January 31, 1999 and is to be reviewed every three (3) years. If the 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 to the FPSC for approval and to the FRCC for information purposes.

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# SEMINOLE ELECTRIC COOPERATIVE, INC. AND MEMBER COOPERATIVES

#### LONG-TERM FUEL EMERGENCY PLAN

#### I. PURPOSE

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. Fossil fuels that are covered by this plan are coal, petroleum coke, natural gas, and diesel fuel oil.

#### II FACILITIES

Coal is the primary fuel presently utilized by Seminole and its member cooperatives at the Seminole Generating Station at Palatka, Florida. Petroleum coke and fuel oil are also used at times at this facility. In addition to coal and petroleum coke, Seminole uses natural gas as a fuel source for its Midulla Generating Station in Hardee County, as well as for several facilities under purchase power agreements. Most of these facilities also use fuel oil as a backup fuel when natural gas is not available. All four fuels will be addressed in this plan. Nuclear fuel is utilized in Crystal River Unit No. 3, where Seminole owns a 1.6994 percent (15 megawatt) share. However, nuclear fuel supply is the responsibility of Progress Energy Florida and, therefore, is not included in this plan.

# III. <u>DEFINITION</u>

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 and its member cooperatives at the Seminole Generating Station. Coal is sourced from various coal regions in Illinois, Indiana, Kentucky, Virginia, West **Deleted:** s

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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

To mitigate risks due to supply, transportation, and unloading interruptions, the plan is to maintain an annual average of 50 days or more of solid fuel in inventory.

#### 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 is 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 fuel supply to the generating plant may be continuous.

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#### 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 and its member cooperatives. No.2 diesel fuel oil is a flame stabilizing fuel and startup fuel presently utilized at the Seminole Generating Station. For the Midulla Generating Station and several facilities under purchase power

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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 for the Midulla Generating Station will be 50 to 100 hours burn for full load operation. For the purchase power 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. No fuel oil is available at the Calpine Osprey facility, but the facility has firm natural gas transportation capacity.

#### **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.

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#### **Emergency Inventory Level**

The fuel inventory level at which an emergency condition is considered to exist is 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 and its member cooperatives for the Midulla Generating Station 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 existing pipelines if storage capacity is available.

Seminole has 570,000 Dth of natural gas storage available for May through October. This storage will facilitate re-supply of natural gas interrupted due to hurricanes in the Gulf of Mexico.

#### 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 III, the Director of Fuel Supply will report such findings to the <u>Sr. Director of System Operations and Seminole's senior management for further action.</u>

#### VIII. ALTERNATE FUEL SOURCES

Seminole's <u>CEO</u> & General Manager or his designee 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 <u>Sr.</u> 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. PURCHASED POWER

The Sr. Director of System Operations shall authorize the Manager of

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Control Center Operations to investigate potential sources of supplemental purchased power. The Operations Department will communicate directly with the Fuel and Marketing Division 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 <a href="mailto:Sr.">Sr.</a> Director of System Operations will so notify the <a href="mailto:CEO">CEO</a> & General Manager <a href="mailto:Accompanying this">Manager <a href="mailto:Accompanying this">Accompanying this</a> 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.

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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.

#### 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 of Energy Delivery, the CEO & General Manager and the Member System Managers, the Sr. Director of System Operations will notify the State Capacity Emergency Coordinator and the Chairman of the FRCC Operating Subcommittee as required. Such notification will be in accordance with Section V of the FRCC Generating Capacity Shortage and/or Florida Electrical Emergency Contingency Plan's, Fuel Supply Shortage Element for the purpose of requesting initiation of a Fuel Supply Alert.

In addition, the <u>Sr.</u> Director of System Operations will immediately initiate actions as described in the following section.

#### XI. CHRONOLOGY OF CONSERVATION MEASURES

The <u>Sr.</u> Director of System Operations, after consultation with the <u>Vice</u> President of <u>Energy Delivery</u> and the <u>.</u>

<u>CEO</u> & General Manager, will work with the Member System Managers to affect the necessary steps to implement the following conservation

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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 <u>Sr.</u> Director of System Operations and, upon consultation with the <u>Vice</u> President of <u>Energy Delivery</u> <u>Vice President of Fuels and Marketing and the CEO & General Manager</u>, it will be the responsibility of the <u>Sr.</u> Director of System Operations to work with the Member System Managers to effect the following steps:

 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 ongoing 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

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effort.

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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 Sr. Director of Operations will authorize the Manager of Control Center Operations or his designee 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 off-specification fuel, supplemental firing of igniter fuels, variations in normal unit, commitments, and energy purchases not normally considered prudent for reasons of cost.

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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 that 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 <u>Sr.</u> Director of System Operations will request that Environmental Affairs begin investigations into possible emergency permit revisions that 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 <u>Sr.</u> Director of System Operations and, upon consultation with the <u>Vice</u> President of <u>Energy Delivery</u>, <u>Vice President of Fuels and Marketing and the <u>CEO</u> & General Manager, it will be the responsibility of the <u>Sr.</u> Director of System Operations to work with the member systems to effect the following steps:</u>

- 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

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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 <u>Sr.</u> Director of Operations will direct the Manager of Control Center Operations or his designee to take any further action toward optimization of the fuel in short supply. At the discretion of the <u>Sr.</u> Director of Operations, the Manager of Control Center Operations or his designee 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 judgment 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 that 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 <u>Sr.</u> Director of System Operations will recommend a plan of action to the <u>appropriate</u> Vice President or his designee, 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 <u>Sr.</u> Director of System Operations and, upon consultation with the <u>Vice President of Energy Deliver</u>, Vice President of <u>Fuels and Marketing</u> and <u>CEO & General Manager</u>, it will be the responsibility of the <u>Sr. Director of System Operations to work with the Member System Managers to effect the following steps:</u>

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- 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 lowest 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 as 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 Deleted: r

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 <u>Sr.</u> 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 level and are anticipated to continue an uncontrolled decline, he will immediately inform the <u>Sr.</u> Director of System Operations, and upon consultation with the Vice President of <u>Energy Delivery</u>, Vice President of <u>Fuels and Marketing</u>, <u>CEO & General Manager</u>, and all Member System Managers, it will be the responsibility of the <u>Sr.</u> Director of System Operations to work with the Member Systems to effect the following steps:

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

The <u>Sr.</u> Director of Operations will consult with the Director of Fuel Supply, Manager of Operations Control Center, and others, as required, to determine the most prudent level of continued service.

3. 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.

#### APPENDIX A

It is the intent of Seminole 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 this will be implemented under the direction of the FRCC through Seminole's <u>Sr.</u> Director of Operations. The persons responsible for the actions of individual participants in this plan are listed below:

Mr. Mike Campbell	Central Florida Electric Cooperative, Inc.		
Mr. Richard K. Davis	Clay Electric Cooperative, Inc.	Deleted: Wm. C. Phillips	
Mr. Jeffery R. Brewington	Glades Electric Cooperative, Inc.	Deleted:	
Mr. Dennie Hamilton	Lee County Electric Cooperative, Inc.	Deleted: Tommy Todd	-
Mr. Wm. T. Mulcay, Jr.	Peace River Electric Cooperative, Inc.	Deleted:	
Mr. James P. Duncan	Sumter Electric Cooperative, Inc.		
Mr. John Martz	Suwannee Valley Electric Cooperative, Inc.		
Mr. Tracy A. Bensley	Talquin Electric Cooperative, Inc.	Deleted: John D. Hewa	
Mr. Julius Hackett	Tri-County Electric Cooperative, Inc.	Deleted:	
Mr. Billy E. Brown	Withlacoochee River Electric Cooperative, Inc.		

#### APPENDIX B

#### **GUIDELINE FOR DEFINING ESSENTIAL SERVICES**

Energy usage by certain consumers that is essential to the health, safety, or welfare of the community should be considered and, <u>insofar as the situation 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.
- 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

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 that make special provisions for the needs of those with life-sustaining medical equipment.

# **UTILITIES COMMISSION**

CITY OF NEW SMYRNA BEACH ELECTRIC, WATER, POLLUTION CONTROL

Post Office Box 100 – 200 Canal Street New Smyrna Beach, Florida 32170-0100 (386) 427-1361



January 31, 2012

Ann Cole
Director, Division of the Commission Clerk and Administrative Services
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

RE: Long term energy emergency plan update per 25-6.0185 FAC

Dear Ms Cole:

The Utilities Commission, City of New Smyrna Beach has reviewed its Long Term Energy Emergency Plan previously submitted per requirements of 25-6.0185 FAC and has determined that no changes are necessary at this time.

If you need additional information, please feel free to contact me at (386) 424-3160. Thank you.

Sincerely,

Timothy P. Beyrle

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Director of System Operations and Generation

cc: Ray Mitchum, General Manager/CEO

Florida Reliability Coordinating Council

DOCUMENT NUMBER - DATE

00780 FEB-9 º

FPSC-COMMISSION CLERK



# Emergency Response Plan -Capacity and Energy **Emergencies**

Created By	<u>Creation Date</u>	Security Level	
Tim Beyrle	9/7/2006	CEII	
Review Cycle	Review Date	<u>Page</u>	
Annual	11/2/2011	1 of 2	
Revision 1		eference: -001 (NERC)	

20.108.01.02

### **Emergency Response Plan – Capacity and Energy Emergencies**

At the warning of a severe capacity or 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 System 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 Reliability Coordinator calls), the following actions shall be taken:

- 1. Notify all department heads, Police and Fire Departments, Hospital and Nursing Homes; City Government, and any other critical customers of the impending situation.
- Issue news media energy conservation bulletins. Also, use appropriate 2. notice/message for the Utilities Commission's telephone service.
- Review the availability of all generation capacity. Contact other utilities 3. for availability of Schedule A Replacement Capacity for any generation expected to be available during the emergency period.
- Coordinate what, if any, actions will be required of the Interconnected 4. Transmission system (system switching by others which may limit flows into or out of NSB) with adjacent Transmission Operators (FPL and PEF) and determine who will be required to perform those actions. necessary, a Transmission Switching Order may be required to implement any required actions or directives. Coordinate with adjacent Balancing Authorities (FPL and PEF) to determine the availability of wholesale or emergency energy supply, or if any Utilities Commission generation will be required for voltage control or other purposes.
- 5. Prioritize critical circuits and potential load shedding feeders.

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

- 6. Load Management:
  - Initiate normal Load Management Relief;
  - Initiate Enhanced Residential Load Management Program; and a.
  - Notify customers with standby generation (such as the hospital, b. police department, nursing home) that we are in a severe demand situation.
- 7. Commence the System Voltage Reduction Program by lowering the 23 kV level by 5%, thereby reducing the load approximately the same amount.
- 8. Should the capacity shortage continue to worsen, place the Water and Pollution Control plants on their auxiliary generating units, and separate



# Emergency Response Plan – Capacity and Energy Emergencies

Tim Beyrle

Review Cycle

Annual

Created By

Review Date 11/2/2011

**Creation Date** 

9/7/2006

CEII
Page
2 of 2

20.108.01.02

Revision 1 Reference: EOP-001 (NERC)

from the distribution system. Notify Bert Fish Medical Center to switch to their auxiliary power.

- 9. Begin Coordinated Load Shedding with selected load outages rotated to match the load to the available capacity.
- 10. Notify all designated agencies of our status operating activities as requested.

If additional staffing is needed to coordinate all of the required duties, the System Control Coordinator on shift should call for additional Coordinators or the System Operations Supervisor for assistance. All coordination with the RC or adjacent BAs and TOPs shall be conducted in accordance with 20.103.03.01 – Communications Protocols.

•	DOCUMENT REVISION TRACKING				
•				Approval	
Rev No.	Date	# Pages	Description	Modified By	Approved By
0	9/7/06	2	Original Document Creation	T Beyrle	T Beyrle
1	8/20/08	2	Inserted new Item #4 detailing those actions which should be coordinated with other Transmission Operators and Balancing Authorities.	T Beyrle	T Beyrle
1	8/3/09	2	Annual review, no changes	T Beyrle	T Beyrle
1	9/22/09	2	New format and document numbering system	T Beyrle	T Beyrle
1	10/13/10	2	Annual review, no changes	T Beyrle	Burke
1	11/2/11	2	Annual review, no changes	T Beyrle	Barke Barke



# Emergency Response Plan – Fuel Shortage Emergencies

 Created By Tim Beyrle
 Creation Date 9/7/2006
 Security Level CEII

 Review Cycle Annual
 Review Date 11/2/2011
 Page 1 of 2

 Revision
 Reference:

20.108.01.03

Revision Referen

## **Emergency Response Plan - Fuel Shortage Emergencies**

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 & Generation that the purchase of additional fuel is not possible, a Fuel Shortage Emergency may be declared. At this time, generator usage times should be prioritized based on peak load and reliability factors, and all maintenance activities of generation units should be postponed if possible.

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 *Emergency Response Plan – Capacity and Energy Emergencies* (20.108.01.02).



# Emergency Response Plan – Fuel Shortage Emergencies

<u>Created By</u> Tim Beyrle <u>Creation Date</u> 9/7/2006

Security Level CEII

Review Cycle Annual Review Date 11/2/2011 <u>Page</u> 2 of 2

20.108.01.03

Revision 1 Reference:

	DOCUMENT REVISION TRACKING					
					Approval	
Rev No.	Date	# Pages	Description	Modified By	Approved By	
0	9/7/06	1	Original Document Creation	T Beyrle	T Beyrle	
1	8/20/08	1	Annual review, no changes	T Beyrle	T Beyrle	
1	8/3/09	1	Annual review, no changes.	T Beyrle	T Beyrle	
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1	10/13/10	2	Annual review, no changes.	T Beyrle		
1	11/2/11	2	Annual review, no changes.	T Beyrle	Buke Buke	



January 26, 2012

To:

Florida Public Service Commission

From: Bernard A. Budnik

**Manager Electric Operations** Reedy Creek Energy Services

5300 Center Drive

Lake Buena Vista, FL 32830 bernie.budnik@disney.com

Re:

Submission of Fuel Emergency Plan in accordance with Rule 25-6.0185 of the Florida Administrative Code on behalf of the Reedy Creek Improvement District

To Whom It May Concern:

In accordance with Rule 25-6.0185 of the Florida Administrative Code, Reedy Creek Improvement District is providing its recently revised long-term fuel emergency plan for Florida Public Service Commission review.

The submittal consists of 9 total pages. Page 1 of the electronic document is a summary cover letter describing the submittal contents. Pages 2 through 5 consist of the final revised procedure (Revision 5) with highlighted segments to indicate modification or added procedural steps. For comparison purposes, pages 6 through 9 of the document contain the previous version of the procedure.

Should you have any questions or problems with the electronic attachment please do not hesitate to contact me via email or at the phone number provided below.

Respectfully,

Bernard A. Budnik

Manager Electric Operations & Network Services

Reedy Creek Energy Services Office: 407-824-6441 Cell: 407-448-2562



# STANDARD OPERATING PROCEDURE

# **Generating Fuel Emergency Plan**

Revision 5, Effective 01/25/12

Approyed by: Bernie Budnik

Approved:

REV.#	DATE	REVISION DESCRIPTION
5	01/25/12	Performed review, updated procedure to remove RCID Balancing Authority reference.

## 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 55 MW combined cycle unit and two 2.3 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 30% 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 responsibilities and actions taken by personnel 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) FRCC Generating Capacity Shortage Plan, July 2007
- c) NERC Reliability Standard EOP-002-3; Capacity & Energy Emergencies

### 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.
- c) This procedure serves as a supplement to the FRCC Generating Capacity Shortage Plan. Local action necessary to respond to and mitigate the impact of fuel emergencies are contained in this document. Regional reporting and coordination requirements are contained in the FRCC procedure and will not be reproduced within this document.

# 5. RESPONSE TO ENERGY EMERGENCIES DUE TO INADEQUATE FUEL SUPPLY

- a) Entrance Conditions The following conditions will constitute the declaration of a Energy Emergency and require action per the following steps:
  - i) Declaration of a fuel supply emergency by the Governor of Florida.
  - ii) Implementation of any element of the FRCC Generating Capacity Shortage Plan by the FRCC State Capacity Emergency Coordinator or designee.
  - iii) Inability to meet <u>projected</u> firm RCID electrical load due to inadequate (or projected inadequate) fuel supplies and/or purchase power.
  - iv) 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) The FRCC shall be notified of resource adequacy by means of the FRCC 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 by Belancing Authorities within the FRCC Region. RCES submits Capacity Assessment information to Progress Energy Florida (PEF) for inclusion into the PEF Capacity Assessment report. The FRCC State Capacity Emergency Coordinator may request more frequent capacity assessments during emergency conditions in order to more accurately assess the region's capabilities.
- d) The Energy Control Center shall communicate real time system condition to the Balancing Area Operator and the FRCC Reliability Coordinator. As necessary, the Energy Control Center shall request the Reliability Coordinator to issue an Energy Alert in accordance with Attachment 1-EOP-002-2.1.
  - i) An Energy Emergency Alert may be initiated for the following reasons:
    - a) When unable to, or it is projected to be unable to meet customer energy requirements, and has been unsuccessful in locating other systems with available resources from which to purchase, or
    - b) Resources cannot be scheduled due to, Available Transfer Capability (ATC) limitations or transmission loading relief limitations.
  - ii) Refer to EOP-002 Attachment 1 for Energy Alert Levels and circumstances necessary for the declaration of each.
  - iii) If ATC limitations are precluding the scheduling of energy imports, request the Reliability Coordinator to evaluate transmission limitations in accordance with EOP-002.
- e) Plant operations personnel shall be notified of the Energy Emergency and determine the following:
  - i) Generating unit availability and maximum capacity.
    - Report to Utility Business Affairs available maximum generating plant capacity and expected fuel burn on each fuel to achieve maximum capacity.
  - ii) Unit fuel source and availability of alternate fuels in the event of a primary fuel shortage.

- Report to Utility Business Affairs alternate fuel inventory levels and any limitations of plant operation on alternate fuels due to equipment issues or regulatory requirements.
- b) If alternate fuel inventory levels will not support the maximum allowed hours of operation based on the current air permit, inquire into the availability of fuel oil purchases to increase inventory.
- iii) Report ability to reschedule, restore or postpone maintenance activities impacting available generating capability.
- f) RCES **Utility Business Affairs** 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.
  - An evaluation shall be made of expected future natural gas delivery capabilities, alternate fuel inventory and available resource capacity to meet firm electrical demand.
- g) RCES **Utility Business Affairs** 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 **Utility Business Affairs** will contact all regional electrical energy marketing entities to identify availability of electrical capacity and/or energy for the periods identified as being deficient and unable to meet load requirements.
- RCES Utility Business Affairs will maintain frequent communications with the RCES Energy Control Center and/or RCID's designated representative for the FRCC fuel emergency conference calls concerning fuel supply inventory and electrical energy availability.
  - During actual or potential fuel emergency conditions the FRCC will request periodic data submittals regarding fuel inventory levels and operating capabilities of each fuel.
- j) RCES Utility Business Affairs shall develop resource dispatch plans, with appropriate deference to economic dispatch, to preserve fuel types with limited availability or limited inventory while also operating within all operating permit requirements.
  - If available resource capacity is not sufficient to meet firm electrical demand due to limited fuel deliveries, fuel switching to the alternate fuel shall be considered.
- k) If load/resource imbalance conditions require, the **Energy Control Center** shall notify large customers to voluntarily curtail unnecessary electrical load.
- RCES Energy Plant Operations shall evaluate any current operational constraints imposed due to environmental limitations and consider requesting a waiver of those limitations. RCES Environmental Compliance personnel shall be consulted and utilized to coordinate any communications with environmental regulatory authorities.
- m) RCES **Utility Business Affairs** shall evaluate contractual options to acquire additional capacity and energy to meet load requirements.
- n) The Energy Control Center shall notify the Balancing Area Operator and the FRCC Reliability Coordinator of the Energy Emergency status and the potential for shedding load if necessary.

o) 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 Balancing Area Operator and FRCC Reliability Coordinator shall be notified of the current condition of the RCID Load Serving Area and all Energy Alerts shall be suspended.

# 7. Revision History

REV. DATE REVISION DESCRIPTION		REVISION DESCRIPTION	
4	02/15/10	Performed annual review, updated procedure format and added reference to NERC Energy Emergency classifications.	
3	01/29/09	<ul> <li>Performed review and updated references – no other changes or modifications.</li> </ul>	
2	12/6/08	<ul> <li>Performed annual review during System Operator Training – no changes or modifications. Due to PCS reporting requirements – no change has been made to the revision number.</li> </ul>	
2	12/18/07	Modified to fit new procedure template and added additional detail in responsibilities.	
1	01/27/06	- Required three year review per Florida Public Service Commission	
0	03/07/03	- Initial	



# STANDARD OPERATING PROCEDURE

# Generating Fuel Emergency Plan

Revision 4, Effective 02/15/10

Approved by: Bernle Budnik

Approved: \_

REV. # DATE REVISION DESCRIPTION		DATE	REVISION DESCRIPTION
	4	02/15/10	Performed annual review, updated procedure format and added reference to NERC
			Energy Emergency classifications.

#### 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 55 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 30% 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 responsibilities and actions taken by personnel 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) FRCC Generating Capacity Shortage Plan, July 2007
- c) NERC Reliability Standard EOP-001-1; Emergency Operations Planning
- d) NERC Reliability Standard EOP-002-2; Capacity & Energy Emergencies

#### 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.
- c) This procedure serves as a supplement to the FRCC Generating Capacity Shortage Plan. Local action necessary to respond to and mitigate the impact of fuel emergencies are contained in this document. Regional reporting and coordination requirements are contained in the FRCC procedure and will not be reproduced within this document.

# 5. RESPONSE TO ENERGY EMERGENCIES DUE TO INADEQUATE FUEL SUPPLY

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- j) RCES Utility Business Affairs shall develop resource dispatch plans, with appropriate deference to economic dispatch, to preserve fuel types with limited availability or limited inventory while also operating within all operating permit requirements.
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- k) If load/resource imbalance conditions require, the **Energy Control Center** shall notify large customers to voluntarily curtail unnecessary electrical load.
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- n) The **Energy Control Center** shall notify the FRCC Reliability Coordinator of the Energy Emergency status and the potential for shedding load if necessary.
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# 7. Revision History

REV.	DATE	REVISION DESCRIPTION	
3	01/29/09	<ul> <li>Performed review and updated references – no other changes or modifications.</li> </ul>	
2	12/6/08	<ul> <li>Performed annual review during System Operator Training – no changes or modifications. Due to PCS reporting requirements – no change has been made to the revision number.</li> </ul>	
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1	01/27/06	- Required three year review per Florida Public Service Commission	
0	03/07/03	- Initial	

# CITY OF TALLAHASSEE FUEL EMERGENCY PLAN

0001MENT NUMBER-DATE
00780 FEB-9 ≥
FPSC-COMMISSION CLERK

# FUEL EMERGENCY PLAN CITY OF TALLAHASSEE ELECTRIC UTILITY

# LONG TERM EMERGENCY PLAN FUEL SUPPLY ELEMENT CONTENTS

System Description	
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## SYSTEM DESCRIPTION

The City owns, operates and maintains an electric generation, transmission and distribution system that supplies power to approximately 107,000 customers.

The City's major generation facilities are located at two different sites. <sup>1</sup> Sam O. Purdom Generating Station (Purdom Plant) located at St. Marks, Florida has approximately 48 MW of steam generation, 233 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 76 MW of steam generation, 300 MW of combined cycle and 128 MW of combustion turbine capability.

All of the steam units can be fired with either natural gas, low sulfur No.6 fuel oil. The combined cycle units are normally fueled with natural gas and can be switched to ultra low sulfur diesel or No. 2 fuel oil (ULSD). The combustion turbines can be fired with either natural gas or ULSD. Due to permit limitations at the Purdom facility, Unit 7 has limited run hours available on #6 fuel oil. As a result, the #6 fuel oil is considered an emergency fuel for Purdom Unit 7.

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 ULSD and No. 6 fuel oil utilizing pre-established agreements with various oil suppliers. There is not a limit on the number of such active agreements and they are identical with all vendors

The City has a barge unloading facility located at the Purdom Plant. Historically this has been utilized for delivery of #6 fuel oil. It is in the process of being modified for #2 fuel oil delivery. This will allow for #2 fuel oil to be delivered by barge or truck to both plants. #6 fuel oil will be delivered by truck to both plants once these modifications are completed.

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. Three of the City's fuel oil tanks (2 at Purdom and 1 at Hopkins) are in the process of being upgraded to the standards required to store #2 fuel oil. Once the tank modifications are completed, the City's fuel oil inventory capacities are shown in the table below.

**Deleted:** or a mixture of the two fuels

All ratings are summer ratings

Tank	Capacity (barrels)	Future Product
Hopkins Tank 1	10,000	#2
Hopkins Tank 2	10,000	#2
Hopkins Tank 3	55,000	#6
Hopkins Tank 4	180,000	#2
Purdom Tank 1	20,000	#2
Purdom Tank 3	77,000	#2
Purdom Tank 4	10,000	#2

The City maintains an oil inventory sufficient to supply the City's operational needs under peak load demands and constrained fuel supply scenarios.

**Deleted:** for approximately an eighteen (18) day period

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 has 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; as well as the Phase VIII expansion projected for commencement on April 1, 2011.

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, sometimes bundled with supply delivered to our citygate. 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 wellhead 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 successfully met past challenges; however like other market participants, the City could encounter difficulties in securing sufficient gas supply at competitive market prices in the future, as a result of catastrophic events.

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 eighteen substations located at various sites that 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. The City has sufficient pipeline capacity on FGT and Southern Natural to serve all our natural gas needs throughout the year. Further, the City maintains sufficient low sulfur diesel and residual fuel oil in inventory to continue operation of its generating facilities during periods of fuel shortages or interruptions. The City also utilizes transmission facilities to import power and reduce fuel consumption in an effort to maintain system integrity and reliability.

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.

Deleted: In accordance with the City's fuel hedging plan, natural gas supply requirements of approximately 25% to 50% (or greater) are covered under shorterm (up to one year) or long-term physical and financial trade transactions.

**Deleted:** for a period of approximately 18 peak load days to meet the City's requirements, in the event gas supply is curtailed for an extended period.

#### NOTIFICATION TO REGIONAL GOVERNMENT OFFICIALS AND NEWS MEDIA:

As soon as City officials determine the reality of a potential long interruption in fuel supply, 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.
- 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. Inside lighting of the plants will be reduced to a minimum.

- 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. All nonessential equipment (fans, pumps, etc.) will be shut down

#### **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 and curtailable 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;
- 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;
- 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.

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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 agreements will be developed between the utilities involved. The original owner or procurer of the fuel will be fully reimbursed 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
- 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.
- Employ all existing load management systems to reduce peaks and increase efficiency of generation.
- 6. The FRCC Executive Board, upon advice from the Operating 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

- 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.

# CITY OF TALLAHASSEE FUEL EMERGENCY PLAN

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DOCUMENT NUMBER-DATE

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FPSC-COMMISSION CLERK

# 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 107,000 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 48 MW of steam generation, 233 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 76 MW of steam generation, 300 MW of combined cycle and 128 MW of combustion turbine capability.

All of the steam units can be fired with either natural gas, low sulfur No.6 fuel oil. The combined cycle units are normally fueled with natural gas and can be switched to ultra low sulfur diesel or No. 2 fuel oil (ULSD). The combustion turbines can be fired with either natural gas or ULSD. Due to permit limitations at the Purdom facility, Unit 7 has limited run hours available on #6 fuel oil. As a result, the #6 fuel oil is considered an emergency fuel for Purdom Unit 7.

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 ULSD and No. 6 fuel oil utilizing pre-established agreements with various oil suppliers. There is not a limit on the number of such active agreements and they are identical with all vendors

The City has a barge unloading facility located at the Purdom Plant. Historically this has been utilized for delivery of #6 fuel oil. It is in the process of being modified for #2 fuel oil delivery. This will allow for #2 fuel oil to be delivered by barge or truck to both plants. #6 fuel oil will be delivered by truck to both plants once these modifications are completed.

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. Three of the City's fuel oil tanks (2 at Purdom and 1 at Hopkins) are in the process of being upgraded to the standards required to store #2 fuel oil. Once the tank modifications are completed, the City's fuel oil inventory capacities are shown in the table below.

<sup>1</sup> All ratings are summer ratings

Tank	Capacity (barrels)	Future Product
Hopkins Tank 1	10,000	#2
Hopkins Tank 2	10,000	#2
Hopkins Tank 3	55,000	#6
Hopkins Tank 4	180,000	#2
Purdom Tank 1	20,000	#2
Purdom Tank 3	77,000	#2
Purdom Tank 4	10,000	#2

The City maintains an oil inventory sufficient to supply the City's operational needs under peak load demands and constrained fuel supply scenarios.

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 has 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; as well as the Phase VIII expansion projected for commencement on April 1, 2011.

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, sometimes bundled with supply delivered to our citygate. 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 wellhead 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 successfully met past challenges; however like other market participants, the City could encounter difficulties in securing sufficient gas supply at competitive market prices in the future, as a result of catastrophic events.

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 eighteen substations located at various sites that 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. The City has sufficient pipeline capacity on FGT and Southern Natural to serve all our natural gas needs throughout the year. Further, the City maintains sufficient low sulfur diesel and residual fuel oil in inventory to continue operation of its generating facilities during periods of fuel shortages or interruptions. The City also utilizes transmission facilities to import power and reduce fuel consumption in an effort to maintain system integrity and reliability.

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 City officials determine the reality of a potential long interruption in fuel supply, 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.
- 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. Inside lighting of 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. All nonessential equipment (fans, pumps, etc.) will be shut down

#### **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 and curtailable 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;
- Communication services, including telephone and telegraph systems, television and radio stations;
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- 5. Request proper legal authorization for proceeding to Steps C through E.

Step C

- 1. Continue all previously implemented steps.
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