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From:

Clark, Eileen < Eileen. Clark@duke-energy.com>

Sent:

Thursday, January 16, 2014 2:29 PM

To:

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Cc:

Triplett, Dianne; Bernier, Matthew; West, Monique; Clark, Eileen

Subject:

140000- DEF's GLRP Filing

Attachments:

Cover Letter and GLRP esig.pdf

This electronic filing is made by:

Matthew R. Bernier 106 E. College Avenue Suite 770 Tallahassee, FL 32301 850-521-1428

Undocketed.

On behalf of Duke Energy Florida, Inc.

Consisting of 61 pages.

The attached document for filings is DEF's General Load Reduction and System Restoration Plan.



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Matthew R. Bernier
Sr. Counsel
Duke Energy Florida, Inc.

January 16, 2014

#### **VIA ELECTRONIC MAIL**

Ms. Carlotta Stauffer, Commission Clerk Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850

Re: Duke Energy Florida, Inc. 's General Load Reduction and System Restoration Plan;

Undocketed

Dear Ms. Stauffer:

Pursuant to Part 294.101(b) of the Rules and Regulations of the Federal Energy Regulatory Commission, 18 C.F.R. § 294.101(b) (2008), and Section 206 of PURPA, please find enclosed for filing Duke Energy Florida, Inc.'s General Load Reduction and System Restoration Plan ("GLRP") to keep on file with the Florida Public Service Commission.

Thank you for your assistance in this matter. Please feel free to call me at (850) 521-1428 should you have any questions concerning this filing.

Respectfully,

s/Matthew R. Bernier
Matthew R. Bernier
Sr. Counsel
Matthew.Bernier@duke-energy.com

MRB/mw Enclosure

## **General Load Reduction Plan - Florida**

Document number

## EMG-SUBS-00002

Applies to: Duke Energy Florida

Keywords: emergency; corporate emergency, generation capacity

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#### 1 Introduction and General Description

- 1.1 This General Load Reduction Plan ("Plan" or "GLRP") covers the guidelines followed by Florida Power Corporation (FPC), a Duke Energy Subsidiary, doing business as (d/b/a) Duke Energy Florida (DEF) in the event a system load reduction is required.
- 1.2 This plan supports DEF compliance with NERC's Emergency Operations Planning (EOP) standards.
- 1.3 In certain situations, it may be necessary to reduce the load on the DEF system to a level that can be safely maintained until either the system load diminishes and/or arrangements can be made for additional resources. Generation and load may also be balanced by initiating demand side management to reduce customer demand. This plan will be implemented, when required and as appropriate, to reduce risks to the interconnected system (NERC standard EOP-002).
- **1.4** The phases included in the plan are as follows:

Phase 0 Normal Operations

Contingency Alert Generation shortage anticipated and/or contingency

coverage is dependent on DSM.

"Red Light" is turned on when the loss of the largest on-line unit would result in implementation of any of the following DSM strategies:

- Pool Pumps

- Water Heaters

HVAC

In certain circumstances, credit may be taken for curtailment of nonfirm sales in determining contingency margin. When the "Red Light" is turned on, non essential work at power plants and critical substations stop and is deferred until system conditions improve.

System Alert Advance Notice to DEF Operations and Field Personnel to

prepare for further phases of the GLRP. The System Alert is for

internal use only.

Phase 1 Alert Anticipated curtailment of IS/CS

**Emergency Phases:** 

Phase 2 Purchases for Interruptible

Service (IS) and Curtailable Service (CS) customers

Phase 3 IS/CS curtailments implemented

Phase 4 Emergency purchases for firm load

Standby Generation

(Includes Schedule A/AF from FP&L)

Phase 5 Automatic or manual interruption of firm load

Phase 6 Reversal of load reduction steps

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Each day, a system assessment is performed to determine the need or likelihood to progress to alert or emergency phases of the plan depending on existing and projected system conditions. The Contingency Alert, System Alert and Phase 1 Alert phases are preparatory and informational and are therefore designated as alerts. Phases 2-5 are the emergency phases of the plan where emergency actions are taken to preserve a balance between resources and system load. The activation of the emergency phases of this plan may be in any order and will depend upon the urgency and magnitude of the given situation. However, the baseline order for the execution of strategies to balance generation with load, absent extenuating circumstances, is as follows but can be modified based on system conditions:

- Interrupt non firm sales
- Initiate fogging at Intercession City/Debary and evaporative cooling at Bartow PB4.
- Switch fuels (gas to oil) at Intercession City/Debary
- Maximize Cogen output
- Voltage Reduction
- Pool Pumps/Water Heaters/HVAC
- IS/CS Purchases
- Activate Environmental Communication Plan
- Peak Load CT Units (cease fogging)
- IS/CS Customers Notified that Curtailment is imminent
- Curtail IS/CS Customers
- Internal and Public Appeals
- · Use Operating Reserves to serve firm load
- · Standby Generation
- Purchase Schedule A/AF Emergency Power
- Interrupt firm load using feeder rotation
- Curtail wholesale customers in proportion to DEF firm load shed

## 2 Organizational Responsibilities

2.1 The responsibilities of each party and organization affected by this Plan are summarized in the following Organizational Responsibilities charts. The Director of Energy Control (or designate) at the Florida Energy Control Center (ECC) is responsible for activating the GLRP. The Florida ECC staff is responsible for coordinating the execution of the plan once activated. When the decision has been made to activate any phase of this plan, each responsible party and business unit will be expected to take the actions summarized in the Organizational Responsibilities charts. These charts are intended to provide a concise summary of GLRP responsibilities, but are not intended to replace the communication and implementation steps contained in sections 5-11 of this document.

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Depending on the severity of the developing situation, communication and action steps may be executed prior to or after actual implementation of the associated phase. The most common operating scenario entails tight operating margins resulting in the implementation of limited strategies without formal GLRP activation. For example, the Florida ECC may implement load reduction strategies outside of this Plan, including but not limited to voltage reduction, pool pumps, water heaters, HVAC control and standby generation.

Any references to the Generation System Operator (GSO) or Transmission System Operator (TSO) taking actions throughout this Plan will be at the discretion of the Director of the Energy Control Center (ECC) or designee if available time permits. However, nothing in this GLRP is intended to alter the authority of operators to take prudent action to maintain system integrity. Operators have the responsibility and authority to operate the power system in a safe, reliable and NERC/FERC compliant manner at all times (NERC Standard EOP-002). At every stage of the plan, operators will monitor conditions on neighboring systems and coordinate with and among adjacent Transmission Operators and Balancing Authorities. (Reference NERC Standard EOP-001)

Director of the Energy Control Center or designee will be responsible for determining and implementing required staffing levels to respond to any emergency conditions on the DEF system, including capacity emergencies, fuel emergencies, storm related emergencies, and any event that would require the implementation of the DEF Disaster Recovery Plan.

#### General Load Reduction Plan Summary of GLRP Organizational Responsibilities

Organization: Call Centers

Plan Phase	Duties and Actions
Contingency Alert: Turn Energy Management System (EMS) "Red Light" ON	□ Prepare for possible Phase 1 activation
System Alert: Declared when it is expected the GLRP will be activated based on projected system conditions.	<ul> <li>DEF operations and field personnel should begin preparations to support the activation of the GLRP phases when they are declared.</li> </ul>
Phase 1: Declared when there is a significant probability that service to interruptible customers will be interrupted.	<ul> <li>Staff phone lines to address customer inquiries (review and evaluate VRU messaging capability to prepare for event)</li> <li>Assist CCD in communications with local customers</li> </ul>
Phase 2: Declared when purchases begin to support IS/CS customers.	□ Staff phone lines to address customer inquiries □ Assist CCD in communications with local customers
Phase 3: Declared when IS/CS curtailments are implemented.	<ul> <li>Staff phone lines to address customer inquiries</li> <li>Assist CCD in communications with local customers</li> </ul>
Phase 4: Declared when emergency purchases (schedule A/AF) for firm load are in progress.	<ul> <li>Staff phone lines to address customer inquiries</li> <li>Assist CCD in communications with local customers</li> <li>Notify life support customers of impending feeder rotations</li> </ul>
Phase 5: Declared when firm load will need to be curtailed in order to balance load and available capacity.	☐ Staff phone lines to address customer inquiries ☐ Assist CCD in communications with local customers
Phase 6: Termination of capacity emergency by executing phases in reverse order as necessary.	□ Staff phone lines to address customer inquiries □ Assist CCD in communications with local customers

## General Load Reduction Plan Summary of GLRP Organizational Responsibilities

Organization: CIG, DSM and Energy Efficiency Services

Plan Phase	Duties and Actions
Contingency Alert: Turn Energy Management System (EMS) "Red Light" ON	<ul> <li>□ Prepare for possible Phase 1 activation</li> <li>□ Prepare for possible activation of the Demand Side Management (DSM) strategies</li> </ul>
System Alert: Declared when it is expected the GLRP will be activated based on projected system conditions.	<ul> <li>DEF operations and field personnel should begin preparations to support the activation of the GLRP phases when they are declared.</li> </ul>
Phase 1: Declared when there is a significant probability that service to interruptible customers will be interrupted.	<ul> <li>□ Prepare for IS/CS purchases and/or curtailment</li> <li>□ Support activation of Demand Side Management</li> <li>(DSM) if requested</li> </ul>
Phase 2: Declared when purchases begin to support IS/CS customers.	<ul> <li>□ Prepare for IS/CS curtailment</li> <li>□ Support activation of Demand Side Management</li> <li>(DSM) if requested</li> </ul>
Phase 3: Declared when IS/CS curtailments are implemented.	<ul> <li>□ Implement IS/CS curtailment</li> <li>□ Verify and ensure that IS/CS customers have been tripped</li> <li>□ Support activation Demand Side Management (DSM) if requested</li> </ul>
Phase 4: Declared when emergency purchases (Schedule A/AF) for firm load are in progress.	☐ Request that major industrial and commercial customers reduce load and inform of anticipated feeder rotation
Phase 5: Declared when firm load will need to be curtailed in order to balance load and available capacity.	□ Notify major industrial and commercial customers of feeder rotations
Phase 6: Termination of capacity emergency by executing phases in reverse order as necessary.	

## General Load Reduction Plan Summary of GLRP Organizational Responsibilities

Organization: Corporate Communications

Plan Phase	Duties and Actions
Contingency Alert: Turn Energy	□ No action taken.
Management System (EMS) "Red Light" ON	
System Alert: Declared when it is expected	☐ Primary Corporate Communications contact
the GLRP will be activated based on	establishes communication with ECC staff and
projected system conditions.	prepares to activate plan phases (see Appendix D)
Phase 1: Declared when there is a	☐ Activate Phase 1 communications (see Appendix D)
significant probability that service to	
interruptible customers will be interrupted.	
Phase 2: Declared when purchases begin	☐ Activate Phase 2 communications (see Appendix D)
to support IS/CS customers.	N 2 0 1/2
Phase 3: Declared when IS/CS curtailments	☐ Activate Phase 3 communications (see Appendix D)
are implemented.	* * * * * * * * * * * * * * * * * * * *
Phase 4: Declared when emergency	☐ Activate Phase 4 communications (see Appendix D)
purchases (Schedule A/AF) for firm load are	☐ Make internal and public appeals for conservation
in progress.	□ Provide public notice of impending firm power
	interruption
	□ Consider activating emergency radio advertising plan
Phase 5: Declared when firm load will need	☐ Activate Phase 5 communications (see Appendix D)
to be curtailed in order to balance load and	<ul> <li>Make internal and public appeals for conservation</li> </ul>
available capacity.	☐ Provide public notice of firm power interruption
	□ Provide power interruption status reports
	☐ Activate emergency radio advertising plan
Phase 6: Termination of capacity	☐ Provide restoration status reports.
emergency by executing phases in reverse	□ Provide power interruption status reports
order as necessary.	□ Make general announcement when event is concluded

## General Load Reduction Plan Summary of GLRP Organizational Responsibilities

Organization: DCC

Plan Phase	Duties and Actions
Contingency Alert: Turn Energy	☐ Prepare for possible Phase 1 activation
Management System (EMS) "Red Light" ON	☐ Prepare to activate voltage reduction
System Alert: Declared when it is expected	□ DEF operations and field personnel should begin
the GLRP will be activated based on	preparations to support the activation of the GLRP
projected system conditions.	phases when they are declared.
Phase 1: Declared when there is a	☐ Be prepared to implement system voltage reductions
significant probability that service to	5 77 SS
interruptible customers will be interrupted.	
Phase 2: Declared when purchases begin to	☐ Be prepared to implement system voltage reduction
support IS/CS customers.	
Phase 3: Declared when IS/CS curtailments	☐ Be prepared to implement system voltage reduction
are implemented.	
Phase 4: Declared when emergency	☐ Prepare to implement feeder rotation if necessary
purchases (Schedule A/AF) for firm load are	
in progress.	
Phase 5: Declared when firm load will need	☐ Implement feeder rotation if required
to be curtailed in order to balance load and	
available capacity.	
Phase 6: Termination of capacity emergency	☐ Coordinate load restoration activities with ECC
by executing phases in reverse order as	☐ Maintain event records
necessary.	□ Voltage Reduction information
	□ Major Notifications
	☐ SCADA documentation for distribution activity

#### General Load Reduction Plan Summary of GLRP Organizational Responsibilities

Organization: Environmental and Regulatory Affairs

Plan Phase	Duties and Actions
Contingency Alert: Turn Energy Management System (EMS) "Red Light" ON	□ Prepare for possible Phase 1 activation
System Alert: Declared when it is expected the GLRP will be activated based on projected system conditions.	<ul> <li>DEF operations and field personnel should begin preparations to support the activation of the GLRP phases when they are declared.</li> </ul>
Phase 1: Declared when there is a significant probability that service to interruptible customers will be interrupted.	☐ Implement of Environmental Communication Plan (ECP) if necessary.
Phase 2: Declared when purchases begin to support IS/CS customers.	☐ Implement of Environmental Communication Plan (ECP) if necessary.
Phase 3: Declared when IS/CS curtailments are implemented.	<ul> <li>Implement of Environmental Communication Plan (ECP) if necessary.</li> </ul>
Phase 4: Declared when emergency purchases (Schedule A/AF) for firm load are in progress.	☐ Implement of Environmental Communication Plan (ECP) if necessary.
Phase 5: Declared when firm load will need to be curtailed in order to balance load and available capacity.	<ul> <li>☐ If activated, coordinate the implementation of the Environmental Communication Plan (ECP).</li> <li>☐ Notify agencies of expected or potential exceedances in accordance with the ECP</li> </ul>
Phase 6: Termination of capacity emergency by executing phases in reverse order as necessary.	

#### General Load Reduction Plan Summary of GLRP Organizational Responsibilities

Organization: Fuels Group

Plan Phase	Duties and Actions
Contingency Alert: Turn Energy	☐ Prepare for possible Phase 1 activation
Management System (EMS) "Red Light" ON	□ Prepare for possible activation of DEF's Fuel
	Emergency Plan
	☐ Take appropriate action to re-supply power plants as
	necessary
	☐ Advise Generation departments of potential fuel
	supply problem areas
System Alert: Declared when it is expected	□ DEF operations and field personnel should begin
the GLRP will be activated based on	preparations to support the activation of the GLRP
projected system conditions.	phases when they are declared.
Phase 1: Declared when there is a	☐ Take appropriate action to re-supply power plants as
significant probability that service to	necessary
interruptible customers will be interrupted.	☐ Advise Generation departments of potential fuel
Dhana 2: Danlayad when newshappa hasin	supply problem areas
Phase 2: Declared when purchases begin to support IS/CS customers.	☐ Take appropriate action to re-supply power plants as
to support 13/03 customers.	necessary  Advise Generation departments of potential fuel
	supply problem areas
Phase 3: Declared when IS/CS curtailments	☐ Take appropriate action to re-supply power plants as
are implemented.	necessary
	□ Advise Generation departments of potential fuel
	supply problem areas
Phase 4: Declared when emergency	☐ Take appropriate action to re-supply power plants as
purchases (Schedule A/AF) for firm load are	necessary
in progress.	□ Advise Generation departments of potential fuel
	supply problem areas
Phase 5: Declared when firm load will need	☐ Take appropriate action to re-supply power plants as
to be curtailed in order to balance load and	necessary
available capacity.	□ Advise Generation departments of potential fuel
	supply problem areas
Phase 6: Termination of capacity	☐ Take appropriate action to re-supply power plants as
emergency by executing phases in reverse	necessary
order as necessary.	☐ Advise Generation departments of potential fuel
	supply problem areas

#### General Load Reduction Plan Summary of GLRP Organizational Responsibilities

Organization: CR3 Nuclear Generation

Plan Phase	Duties and Actions
Contingency Alert: Turn Energy Management System (EMS) "Red Light" ON	<ul> <li>Instruct all personnel working at power plant and 500 kV substations to discontinue any maintenance, operations and all non-essential activities that have the potential to trip a generating unit</li> <li>Maximize unit output</li> <li>Implement freeze protection if needed</li> </ul>
System Alert: Declared when it is expected the GLRP will be activated based on projected system conditions.  Phase 1: Declared when there is a	DEF operations and field personnel should begin preparations to support the activation of the GLRP phases when they are declared.  Instruct all personnel working at power plant and 500
significant probability that service to interruptible customers will be interrupted.	kV substations to discontinue any maintenance, operations and all non-essential activities that have the potential to trip a generating unit  Maximize unit output Implement freeze protection if needed
Phase 2: Declared when purchases begin to support IS/CS customers.	<ul> <li>Instruct all personnel working at power plant and 500 kV substations to discontinue any maintenance, operations and all non-essential activities that have the potential to trip a generating unit</li> <li>Maximize unit output</li> <li>Implement freeze protection if needed</li> </ul>
Phase 3: Declared when IS/CS curtailments are implemented.	<ul> <li>Instruct all personnel working at power plant and 500 kV substations to discontinue any maintenance, operations and all non-essential activities that have the potential to trip a generating unit</li> <li>Maximize unit output</li> <li>Implement freeze protection if needed</li> </ul>
Phase 4: Declared when emergency purchases (Schedule A/AF) for firm load are in progress.	<ul> <li>□ Instruct all personnel working at power plant and 500 kV substations to discontinue any maintenance, operations and all non-essential activities that have the potential to trip a generating unit</li> <li>□ Maximize unit output</li> <li>□ Implement freeze protection if needed</li> </ul>
Phase 5: Declared when firm load will need to be curtailed in order to balance load and available capacity.	<ul> <li>□ Instruct all personnel working at power plant and 500 kV substations to discontinue any maintenance, operations and all non-essential activities that have the potential to trip a generating unit</li> <li>□ Maximize unit output</li> <li>□ Implement freeze protection if needed</li> </ul>
Phase 6: Termination of capacity emergency by executing phases in reverse order as necessary.	<ul> <li>□ Watch VAR output to make sure they are not driven to instability limits by reactive power coming from unloaded transmission lines</li> <li>□ Instruct all personnel working at power plant and 500 kV substations to discontinue any maintenance, operations and all non-essential activities that have the potential to trip a generating unit</li> <li>□ When red light is "off", instruct all personnel working at power plant and 500 kV substations to resume work</li> </ul>

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## General Load Reduction Plan Summary of GLRP Organizational Responsibilities

Organization: POG

Plan Phase	Duties and Actions
Contingency Alert: Turn Energy Management System (EMS) "Red Light" ON	<ul> <li>□ Prepare for possible Phase 1 activation</li> <li>□ Instruct all personnel working at power plant to discontinue any maintenance, operations and all non-essential activities that have the potential to trip a generating unit</li> <li>□ Prepare to maximize both fossil and CT unit output</li> <li>□ Coordinate manning of peaker sites with ECC</li> <li>□ Implement freeze protection if needed</li> </ul>
<b>System Alert:</b> Declared when it is expected the GLRP will be activated based on projected system conditions.	<ul> <li>DEF operations and field personnel should begin preparations to support the activation of the GLRP phases when they are declared</li> </ul>
Phase 1: Declared when there is a significant probability that service to interruptible customers will be interrupted.	<ul> <li>Instruct all personnel working at power plant to discontinue any maintenance, operations and all non-essential activities that have the potential to trip a generating unit</li> <li>Maximize fossil unit output</li> <li>Prepare to maximize online peaker output and to turn on offline peakers</li> <li>Prepare for evaporative cooling at BART PB4.</li> <li>Coordinate CT unit fogging and running at "peak load" with ECC.</li> </ul>
Phase 2: Declared when purchases begin to support IS/CS customers.	<ul> <li>□ Instruct all personnel working at power plant to discontinue any maintenance, operations and all non-essential activities that have the potential to trip a generating unit</li> <li>□ Maximize fossil unit output</li> <li>□ Prepare to maximize online peaker output and to turn on offline peakers</li> </ul>
Phase 3: Declared when IS/CS curtailments are implemented.	<ul> <li>Instruct all personnel working at power plant to discontinue any maintenance, operations and all non-essential activities that have the potential to trip a generating unit</li> <li>Maximize fossil unit output</li> <li>Prepare to maximize online peaker output and to turn on offline peakers</li> </ul>
Phase 4: Declared when emergency purchases (Schedule A/AF) for firm load are in progress.	<ul> <li>Instruct all personnel working at power plant to discontinue any maintenance, operations and all non-essential activities that have the potential to trip a generating unit</li> <li>If the ECP has been activated, obtain approval and prepare to increase output at de-rated fossil and CT units to avoid feeder rotations.</li> </ul>
Phase 5: Declared when firm load will need to be curtailed in order to balance load and available capacity.	<ul> <li>Instruct all personnel working at power plant to discontinue any maintenance, operations and all non-essential activities that have the potential to trip a generating unit</li> <li>If the ECP has been activated, obtain approval and prepare to increase output at de-rated fossil and CT units to avoid feeder rotations.</li> </ul>

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#### General Load Reduction Plan Summary of GLRP Organizational Responsibilities

Organization: POG (Continued)

Phase 6: Termination of capacity emergency by executing phases in reverse order as necessary.	Watch VAR output to make sure they are not driven to instability limits by reactive power coming from unloaded transmission lines
	Instruct all personnel working at power plant to discontinue any maintenance, operations and all non-essential activities that have the potential to trip a generating unit When red light is "off", instruct all personnel working at power plant to resume work

# General Load Reduction Plan Summary of GLRP Organizational Responsibilities

Organization: Regulated Commercial Operations

Plan Phase	Duties and Actions
Contingency Alert: Turn Energy Management System (EMS) "Red Light" ON	<ul> <li>Prepare for purchases to support IS/CS load and emergency purchases for firm load</li> <li>Contact cogen facilities to request maximum output</li> </ul>
System Alert: Declared when it is expected the GLRP will be activated based on projected system conditions.	<ul> <li>DEF operations and field personnel should begin preparations to support the activation of the GLRP phases when they are declared.</li> </ul>
Phase 1: Declared when there is a significant probability that service to interruptible customers will be interrupted.	<ul> <li>□ Prepare for purchases for IS/CS customers</li> <li>□ Coordinate curtailment of non-firm sales with ECC</li> </ul>
Phase 2: Declared when purchases begin to support IS/CS customers.	□ Purchases for IS/CS customers
Phase 3: Declared when IS/CS curtailments are implemented.	
Phase 4: Declared when emergency purchases (Schedule A/AF) for firm load are in progress.	□ Emergency purchases for firm load
Phase 5: Declared when firm load will need to be curtailed in order to balance load and available capacity.	□ Emergency purchases for firm load
Phase 6: Termination of capacity emergency by executing phases in reverse order as necessary.	

#### General Load Reduction Plan Summary of GLRP Organizational Responsibilities

## Organization: <u>VP Transmission System Operations or Designee</u>

Plan Phase	Duties and Actions
Contingency Alert: Turn Energy	□ No action required
Management System (EMS) "Red Light" ON	
System Alert: Declared when it is expected	<ul> <li>DEF operations and field personnel should begin</li> </ul>
the GLRP will be activated based on	preparations to support the activation of the GLRP
projected system conditions.	phases when they are declared.
Phase 1: Declared when there is a	□ Authorize GLRP plan activation
significant probability that service to	□ Notify PE management of system status
interruptible customers will be interrupted.	
Phase 2: Declared when purchases begin	<ul> <li>Notify PE management of system status</li> </ul>
to support IS/CS customers.	
Phase 3: Declared when IS/CS curtailments	<ul> <li>Notify PE management of system status</li> </ul>
are implemented.	APT 1700
Phase 4: Declared when emergency	□ Notify PE management of system status
purchases (Schedule A/AF) for firm load are	
in progress.	
Phase 5: Declared when firm load will need	□ Notify PE management of system status
to be curtailed in order to balance load and	
available capacity.	
Phase 6: Termination of capacity	□ Notify PE management of system status
emergency by executing phases in reverse	
order as necessary.	

## 3 Summary of Capacity Emergency Alert Phases/Levels

DEF Phases	NERC Levels	FRCC Levels (declared by FRCC SCEC)
Contingency Alert: Turn Energy Management System (EMS) "Red Light" ON when loss of largest on-line unit would result in implementation of any of the following DSM strategies: pool pumps, water heaters and/or HVAC.		Advisory: Based on temperature triggers up to three days out, utilities
System Alert: An advance notification to DEF Personnel to prepare for further phases of the GLRP. This is an internal alert for DEF only.		issuing public appeals, or potential natural gas supply disruption.
Phase 1: Declared when there is a significant probability that service to interruptible customers will be interrupted.		
Phase 2: Declared when purchases begin to support IS/CS customers.		Alert: FRCC operating margin is such that loss of
Phase 3: Declared when IS/CS curtailments are implemented.	Alert 1*: All available resources are in use. Non-firm energy sales have been curtailed. Concern over reserves.	largest unit will require interruption of firm load in Florida or disruption of gas pipeline(s) service region will adversely affect generation
Phase 4: Declared when emergency purchases (Schedule A/AF) for firm load are in progress.	Alert 2*: Load management in effect. Procedures may include public appeals, voltage reduction, DSM, curtailment of non-firm load, conservation measures. Firm load not interrupted	capacity in the FRCC region
Phase 5: Declared when firm load will need to be curtailed in order to balance load and available capacity.	Alert 3*: Firm load interruption imminent or in progress. Continuation of all Alert 2 actions.	Emergency: One or more utilities cannot supply firm load obligations
Phase 6: Termination of capacity emergency by executing phases in reverse order as necessary.		
Phase 0: Normal Operations		

<sup>\*</sup>The NERC EEAs can be requested by an entity but are declared by the RC. These can be declared if the entity or the RC foresees the event occurring. Please see section 14.2 (page 40) for further explanation.

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#### **4 System Assessment Protocol**

This section describes the capacity assessment and communications process used each day to develop an operational plan for the DEF system.

#### 4.1 Daily Plant Communications

The GSO communicates with DEF generation sites at approximately 0500 to determine the current status and near term outlook for DEF generation.

#### 4.2 Daily Load Forecasting

The DEF load forecast is reviewed and revised twice each day, by 0700 and 1400. Additional forecast reviews and/or revisions may be initiated by the Director of the Energy Control Center or by the load forecaster in Raleigh based on changing system conditions.

#### 4.3 Daily Capacity Assessment and Operating Plan

The Florida ECC completes a daily internal capacity assessment for the DEF system including generation availability, load forecast and reserve margin. This information serves as the basis for internal planning to meet projected load levels.

The Florida ECC communicates with Power Marketing, the fuels group, and the DSM group to develop an operating plan based on the current capacity assessment. This communication results in plans and decisions regarding daily power purchases and sales as well as contingency plans to meet system load levels. The GSO also maintains contact with power marketing personnel throughout the day.

The DEF system capacity assessment is also submitted to the State Capacity Emergency Coordinator (SCEC) as part of the Florida Reliability Coordinating Council (FRCC) daily capacity assessment process. This capacity assessment is due by 9:00 AM during summer months for the current day's peak, and by 11:00 AM during winter months for the following morning's peak. These seasonal changes generally take place on or about April 1 and November 1 and are coordinated by the FRCC and SCEC.

#### 4.4 Daily DSM Probability Communications

The Florida ECC provides Load Management personnel and select Corporate Communications staff with probability estimates for the use of load management strategies on days when the probability for the day is greater than "unlikely". Projections are also provided for weekend and holiday days, and these estimates are updated each day in the event that there is a change from the original estimates. These probability estimates are communicated to IS/CS customers and DEF field personnel to provide an early indication of the potential for load curtailments and interruptions for the current day (summer) or following day (winter). By contrast, the initiation of phases 1, 2 and 3 in connection with a GLRP event should be used only on the day of the event, generally not more than three hours prior to the actual event, because many IS/CS customers may take actions in response to the declaration of GLRP phases 1-3.

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#### 4.5 Assessment of Generation De-rations Due to POD Limitations

The Crystal River South (CR 1, 2 and 3) and Anclote facilities are susceptible to point of discharge (POD) temperature limits.

If POD limits at Crystal River become a problem during a capacity emergency, the designee will first evaluate all available options to seek or exercise a waiver of POD limitations. If the de-ration of generation is required, determine which Crystal River unit (1 or 2) will reduce generation to avoid exceeding the POD limit. The Crystal River plant personnel will determine the generation reduction necessary for the selected unit.

If the POD limit is at Anclote, the designee will again evaluate all available options or exercise a waiver of the POD limitations. If a de-ration is required, the designee will reduce generation at either unit 1, 2 or both. The plant operating personnel will determine the specific reduction in generation.

After DEF permitted facilities have taken all possible measures during a generating capacity emergency due to such circumstances to avoid rolling blackouts (i.e. all power purchasing options, curtailing power to all interruptible customers, and all other load management alternatives) the facility may determine that it is necessary to temporarily exceed permitted thermal limits. NPDES permits authorize appropriate actions to deal with upset or bypass situations prior to notifying the Department.

#### 4.6 Implementation of the Plan

- **4.6.1** The plan may be implemented and communications may be issued during a capacity emergency using text messaging. Messages may be issued to GLRP participants using the system text messaging list "TOP ECC FL GLRP-TXT" through the DEF e-mail system.
- **4.6.2** The phases of the Plan may be declared and executed in any order as required by system circumstances. When the peak of an event has passed and restoration activities or a return to normal system operating conditions is in progress, a Phase 6 restoration should be declared in conjunction with the execution of the GLRP phases in reverse order as appropriate.
- 4.6.3 Notifications in the early stages of Plan execution may be pre-positioned out of the normal time sequence indicated in the Plan in order to provide adequate advance notice of changing conditions. This will depend on the extent of available advance notice of the approaching capacity emergency, the timing relative to weekend and holiday periods, and seasonal factors. For example, notifications for weekend events should begin on Friday and public appeals for winter peaks should begin the prior day when sufficient certainty regarding the impending emergency permits.

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## 5 Contingency Alert Procedure: Red Light On

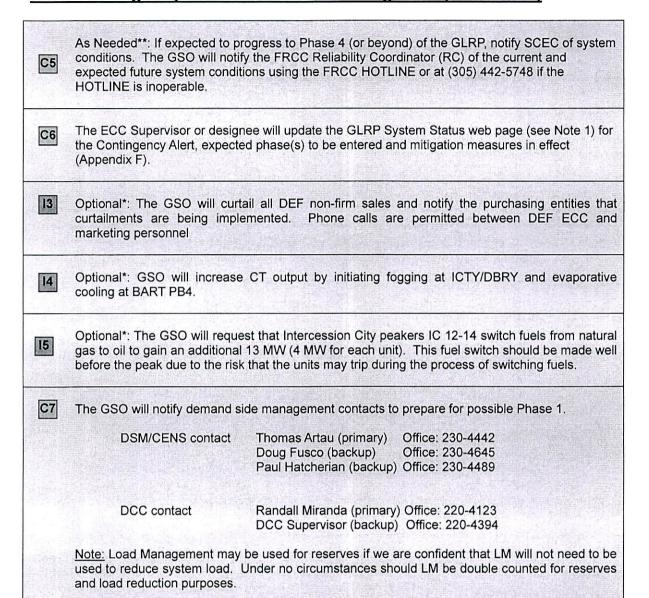
Prere	equisites:
	A contingency alert is declared when the loss of the largest on-line unit will result in implementation of any of the following DSM strategies: pool pumps, water heaters, and/or HVAC. Margins prior to the use of DSM may include curtailment of non-firm sales. DEF is able to maintain Operating and Regulating Reserves.
C	communication Step Implementation Steps
G	Generation System Operator (GSO) Transmission System Operator (TSC
Sã E	CC Supervisor or designee (GSO or TSO) Management
C1	The ECC Supervisor on Duty or designee will notify Director of Energy Control (or designee), Manager Transmission Services and ECC Compliance Program Leader if Marketers are unable to make purchases to secure margins that will mitigate the "contingency alert" status.
	Glenn Dooley Office 220-4180
	ECC Supervisor Office 220-4818 Lee Schuster Office 220-4981
	Paul Schmitt Office 220-4350
C2	The GSO will notify other System Operators on duty of the situation.
11	The GSO will toggle the EMS Red Light status to ON.
C3	The GSO will notify all generation sites that the EMS Red Light is now ON. Plant personnel shall be instructed to discontinue any maintenance and operations activities that have the potential to trip a generating unit and all non-essential work at the CR3 nuclear unit.
C4	The GSO will have DBRY dispatch personnel to RIOP
12	The TSO will contact all personnel logged into power plant, 500 kV, 230 kV and other critical substations (such as tie-line stations) to cease work and exit substations due to EMS Red Light ON condition.
	Personnel are to be instructed to cease all work that could trip a breaker, line or generating unit or otherwise jeopardize the system (examples are working on relays, tracing wires, pulling wires, sweeping floors, etc.). Limited personnel (Substation and Relay) are allowed to remain in substations and control houses in the event that they are needed for emergency purposes. While in the control house they can continue with safe activities (examples are reading prints, doing paper work or planning future work).

<sup>\*\*</sup> Steps noted "As Needed" are dependent upon the current and expected system conditions. These steps may be addressed multiple times in each phase of the GLRP.

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<sup>\*</sup> Steps noted as "Optional" are dependent upon how far DEF is expected to progress into the various phases of the GLRP on a real time or contingency basis. If the step is not implemented during this phase of the plan, it will need to be addressed in subsequent phases of the plan.

#### 5 Contingency Alert Procedure: Red Light On (Continued)



Note 1: The GLRP web status page is located from <a href="http://wwwecc">http://wwwecc</a> under the link "System Reliability Status" (<a href="http://DEFecc/glrp/SystemStatus.asp">http://wwwecc</a> under the link "System Reliability Status" (<a href="http://DEFecc/glrp/SystemStatus.asp">http://wwwecc</a> under the link "System Reliability Status" (<a href="http://wwwecc">http://wwwecc</a> under the link "Sys

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<sup>\*</sup> Steps noted as "Optional" are dependent upon how far DEF is expected to progress into the various phases of the GLRP on a real time or contingency basis. If the step is not implemented during this phase of the plan, it will need to be addressed in subsequent phases of the plan.

<sup>\*\*</sup> Steps noted "As Needed" are dependent upon the current and expected system conditions. These steps may be addressed multiple times in each phase of the GLRP.

#### **Contingency Alert Procedure: Red Light On (Continued)** 5

16 The ECC Supervisors or designee will contact the Peaker Generation Manager in the event that peaker sites need to be manned.

Peaker Gen. FL:

Larry Hatcher

Office: (727) 240-6335

17

Optional\*: The GSO will request that co-generators maximize output during the period of expected capacity shortage. Co-generation contacts are:

Primary contact Secondary contacts **Greg Hart** Dave Gammon Office 230-4510 Office 230-4597

Tamara Waldman Office 230-4517

18

The ECC Supervisors or designee will contact plant managers regarding freeze protection preparations if required by weather conditions. Contacts are:

Peaker Gen. FL: Fossil Gen. FL:

Larry Hatcher

Office: (727) 240-6355

Nuclear:

Kris Edmondson Office: 230-5853 Terry Hobbs

Office: (352) 563-4358 Office: 240-3848

Nuclear Backup:

Blair Wunderly

The TSO will notify the DCC Supervisor on Duty (220-4394) of system conditions and the C8 possible need to implement voltage reduction. System voltage reduction will be implemented when required by system conditions. When voltage reduction is initiated, a Major Notification-Voltage Reduction will be sent by the DCC Supervisor for each region that is initiated.

C9

The ECC Supervisors or designee will notify the Power Marketing trader on duty (919-546-7161) of system conditions and to prepare for implementation of purchases to support IS/CS customers. Preferred method of communication is "Gen Chat" but voice communication is allowed.

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<sup>\*</sup> Steps noted as "Optional" are dependent upon how far DEF is expected to progress into the various phases of the GLRP on a real time or contingency basis. If the step is not implemented during this phase of the plan, it will need to be addressed in subsequent phases of the plan.

<sup>\*\*</sup> Steps noted "As Needed" are dependent upon the current and expected system conditions. These steps may be addressed multiple times in each phase of the GLRP.

## 6 System Alert Procedure

Prere	equisites:
	A System Alert is declared when it is expected that the GLRP will be activated based on projected system conditions. The purpose of the system alert is to provide advance notice to DEF operations and field personnel to begin preparations to support the GLRP phases when they are declared. Information contained in a System Alert message is for internal use only, and should not be released outside of the company. DEF is able to maintain Operating and Regulating Reserves.
CC	ommunication and III Implementation Steps
=	eneration System Operator (GSO) Transmission System Operator (TSO)
	CC Supervisor or designee (GSO or TSO) Management
C1	The ECC Supervisor on Duty or designee will provide notification that a System Alert has been declared to the, Director of Energy Control (or designee), Manager Transmission Services, ECC Compliance Program Leader, and DEF operations and field personnel using the system mailing list "TOP ECC FL GLRP-TXT" for text messages and "TOP ECC FL GLRP-EM" for e-mail messages.  The System Alert message should indicate when it is likely that the GLRP will be activated. During the summer months the System Alert message will typically be issued early in the day, 4-6 hours prior to the start of a GLRP event. During the winter months the System Alert may be issued on a day-ahead basis to prepare for expected system conditions during the system peak on the following day.
	The System Alert message should indicate how far DEF expects to advance in the GLRP phases in the event that system conditions do not change. Operations and field personnel should immediately begin to prepare to support these GLRP phases in the event that they are declared within the indicated timeframe.
	Glenn Dooley Office 220-4180 ECC Supervisors Office 220-4818 Lee Schuster Office 220-4981 Paul Schmitt Office 220-4350
C2	The ECC Supervisors or designee will update the GLRP System Status web page for the System Alert (Appendix F).
C3	The ECC Supervisors or designee will contact the DCC Supervisor.

<sup>\*\*</sup> Steps noted "As Needed" are dependent upon the current and expected system conditions. These steps may be addressed multiple times in each phase of the GLRP.

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<sup>\*</sup> Steps noted as "Optional" are dependent upon how far DEF is expected to progress into the various phases of the GLRP on a real time or contingency basis. If the step is not implemented during this phase of the plan, it will need to be addressed in subsequent phases of the plan

#### 6 System Alert Procedure (Continued)

C4

The Director of ECC (or designee) will determine the probability of issuing public appeals, rolling outages and timing and then contact Corporate Communications. Corporate Communications will then activate direct-to-customer messaging plan.

Sterling Ivey (primary)

Kristen Perry (backup)

Jeff Brooks (backup)

Media Line (backup)

Office: (727) 230-4722

Office: (727) 431-2939

Office: 770-4710

Office: (800)-559-3853



As Needed\*\*: If expected to progress to Phase 4 (or beyond) of the GLRP, notify SCEC of system conditions. The GSO will notify the FRCC Reliability Coordinator (RC) of the current and expected future system conditions using the FRCC HOTLINE or at (305) 442-5748 if the HOTLINE is inoperable.

<sup>\*</sup> Steps noted as "Optional" are dependent upon how far DEF is expected to progress into the various phases of the GLRP on a real time or contingency basis. If the step is not implemented during this phase of the plan, it will need to be addressed in subsequent phases of the plan.

<sup>\*\*</sup> Steps noted "As Needed" are dependent upon the current and expected system conditions. These steps may be addressed multiple times in each phase of the GLRP.

## 7 Phase 1: Capacity Alert Procedure

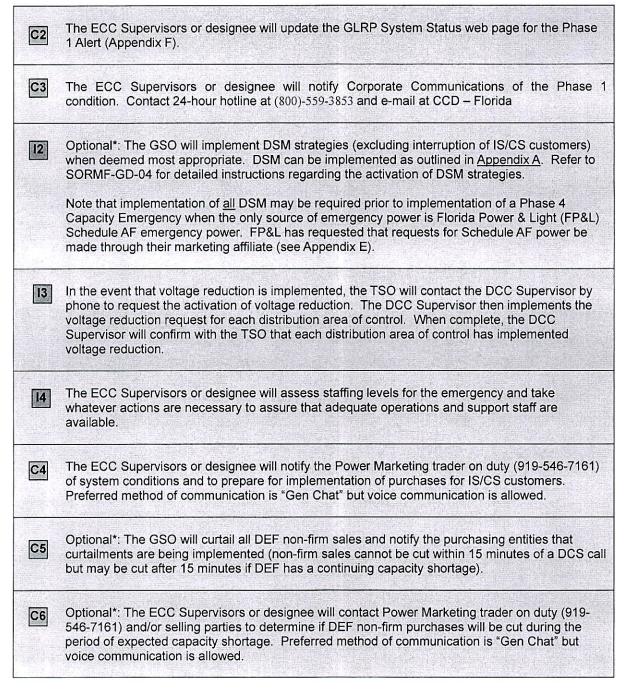
Prere	equisites:
	A Phase I Capacity Alert is declared when there is a significant probability that service to interruptible commercial and industrial customers will be interrupted. If the event is expected to advance to Phase 3, where possible always declare Phase 1 prior to Phase 3 in order to provide notice to IS/CS customers. Phase 1-3 should be declared only on the day of the event to provide notice of an impending event, generally within three hours of the expected event. DEF is able to maintain Operating and Regulating Reserves.
G	ommunication and Implementation Steps eneration System Operator (GSO) Transmission System Operator (TSO) CC Supervisor or designee (GSO or TSO) Management
<b>C1</b>	The ECC Supervisor on Duty or designee will provide notification that a Phase 1 Capacity Alert has been declared to the, Director of Energy Control (or designee), Manager Transmission Services, ECC Compliance Program Leader, and DEF operations and field personnel using the system mailing list "TOP ECC FL GLRP-TXT" for text messages and "TOP ECC FL GLRP-EM" for e-mail messages.  Glenn Dooley Office 220-4180 ECC Supervisors Office 220-4818 Lee Schuster Office 220-4981 Paul Schmitt Office 220-4350
	The ECC Supervisor on Duty or designee will declare a Phase 1 Generating Capacity Alert condition by initiating a Phase 1 Alert in the DSM system and the Phase 1 strategy in the DSM program.  The CENS will automatically send the 'Phase 1 - Capacity Alert Order-of-Day' notification message to DEF internal personnel and IS/CS customers. When DSM strategies for Phases 1, 2, or 3 are activated or terminated, CENS panels at customer locations indicate the system status and text messages are sent to DEF internal personnel and IS/CS customers.  When IS/CS customers receive the Phase 1 Capacity Alert notification (amber CENS panel light is 'ON') they are aware that DEF may find it necessary to open breakers and switches to their loads.  When the CIG representatives receive a message indicating a Phase 1 Capacity Alert condition exists, they will contact the cogeneration facilities they are responsible for and request or confirm that these facilities are maximizing unit output.

<sup>\*\*</sup> Steps noted "As Needed" are dependent upon the current and expected system conditions. These steps may be addressed multiple times in each phase of the GLRP.

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<sup>\*</sup> Steps noted as "Optional" are dependent upon how far DEF is expected to progress into the various phases of the GLRP on a real time or contingency basis. If the step is not implemented during this phase of the plan, it will need to be addressed in subsequent phases of the plan.

#### 7 Phase 1: Capacity Alert Procedure (Continued)

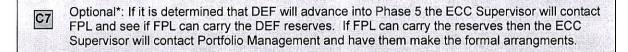


<sup>\*</sup> Steps noted as "Optional" are dependent upon how far DEF is expected to progress into the various phases of the GLRP on a real time or contingency basis. If the step is not implemented during this phase of the plan, it will need to be addressed in subsequent phases of the plan.

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<sup>\*\*</sup> Steps noted "As Needed" are dependent upon the current and expected system conditions. These steps may be addressed multiple times in each phase of the GLRP.

#### 7 Phase 1: Capacity Alert Procedure (Continued)



As Needed\*: If expected to progress to Phase 4 (or beyond) of the GLRP, notify SCEC of system conditions. The GSO will notify the FRCC Reliability Coordinator (RC) of the current and future system conditions using the FRCC HOTLINE or at (305) 442-5748 if the HOTLINE is inoperable.

<sup>\*</sup> Steps noted as "Optional" are dependent upon how far DEF is expected to progress into the various phases of the GLRP on a real time or contingency basis. If the step is not implemented during this phase of the plan, it will need to be addressed in subsequent phases of the plan.

<sup>\*\*</sup> Steps noted "As Needed" are dependent upon the current and expected system conditions. These steps may be addressed multiple times in each phase of the GLRP.

## 8 Phase 2 Capacity Emergency Procedure

Prere	equisites:
	A Phase 2 Capacity Emergency is declared when off-system purchases begin to support service to IS/CS customers. In the event that buy-thru purchases for IS/CS are not available, do not declare Phase 2, but proceed directly to the Phase 3 capacity emergency procedure if system conditions warrant. DEF is able to maintain Operating and Regulating Reserves.
C (	Communication and Implementation Steps:
G	eneration System Operator (GSO) Transmission System Operator (TSC
E	CC Supervisor or designee (GSO or TSO) Management
<b>C1</b>	The ECC Supervisor on Duty or designee will provide notification that a Phase 2 Capacity Emergency has been declared to the, Director of Energy Control (or designee), Manager Transmission Services, ECC Compliance Program Leader, and DEF operations and field personnel using the system mailing list "TOP ECC FL GLRP-TXT" for text messages and "TOP ECC FL GLRP-EM" for e-mail messages.
	Glenn Dooley Office 220-4180 ECC Supervisors Office 220-4818 Lee Schuster Office 220-4981 Paul Schmitt Office 220-4350
[11]	The ECC Supervisors or designee will contact Power Marketing to request the purchase of the required amount of power to support IS/CS customers from neighboring utilities.
	DEF will make an effort to purchase power to continue serving our IS/CS customers. If there is not sufficient purchased energy available to continue serving IS/CS customers, a Phase 3 emergency will be declared.
	DEF will interrupt IS/CS load to serve another company's firm load and avoid firm load curtailment. DEF will not interrupt IS/CS load to serve another companies interruptible load. This is by RC/state mandate.
	If appropriate, the ECC Supervisors or designee will request that Power Marketing attempt to purchase energy against DSM.
[12]	When purchase schedules begin to support IS/CS customers, the ECC Supervisors or designee will declare a Phase 2 Generating Capacity condition by initiating a Phase 2 Emergency in the DSM system and the Phase 2 strategy in the DSM program.
<b>C2</b>	The ECC Supervisors or designee will update the GLRP System Status web page for the Phase 2 Emergency (Appendix F).

<sup>\*\*</sup> Steps noted "As Needed" are dependent upon the current and expected system conditions. These steps may be addressed multiple times in each phase of the GLRP.

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<sup>\*</sup> Steps noted as "Optional" are dependent upon how far DEF is expected to progress into the various phases of the GLRP on a real time or contingency basis. If the step is not implemented during this phase of the plan, it will need to be addressed in subsequent phases of the plan.

## 8 Phase 2 Capacity Emergency Procedure (continued)



The ECC Supervisors or designee will notify Corporate Communications of the Phase 2 condition. Contact 24-hour hotline at (800)-559-3853 and e-mail at CCD – Florida

<sup>\*</sup> Steps noted as "Optional" are dependent upon how far DEF is expected to progress into the various phases of the GLRP on a real time or contingency basis. If the step is not implemented during this phase of the plan, it will need to be addressed in subsequent phases of the plan.

** Steps noted "As Needed" are dependent upon the current and expected system conditions.	These steps may be addressed
multiple times in each phase of the GLRP.	

## 9 Phase 3 Capacity Emergency Procedure

quisites:			
A Phase 3 Capacity Emergency is declared when it becomes necessary to curtail IS/CS customer load. Where possible always declare Phase 1 prior to Phase 3 in order to provide notice of an impending Phase 3 declaration to IS/CS customers. DEF is able to maintain Operating and Regulating Reserves.			
communication and Implementation Steps eneration System Operator (GSO) Transmission System Operator (TSO CC Supervisor or designee (GSO or TSO) Management			
The ECC Supervisor on Duty or designee will provide notification that a Phase 3 Capacity Emergency has been declared to the, Director of Energy Control (or designee), Manager Transmission Services, ECC Compliance Program Leader, and DEF operations and field personnel using the system mailing list "TOP ECC FL GLRP-TXT" for text messages and "TOP ECC FL GLRP-EM" for e-mail messages.  Glenn Dooley Office 220-4180 ECC Supervisors Office 220-4818 Lee Schuster Office 220-4981 Paul Schmitt Office 220-4350			
The GSO will bring on all available generation if not already on and verify that all equipment maintenance is postponed.			
As Needed**: The ECC Supervisor on Duty or designee will contact the RC over the FRCC Hotline (a recorded line must be used) and request that a Energy Emergency Alert Level 1 be declared for Duke Energy Florida.			
The GSO will notify the FRCC RC of the situation using the FRCC HOTLINE or at (305) 442-5748 if HOTLINE inoperable.			
The ECC Supervisors or designee will notify the DCC Supervisor on Duty (220-4934) of system conditions and the possible need to implement voltage reduction.  The ECC Supervisor (or designee) will also notify the DCC Supervisor (220-4394) that EMS IS/CS customers will be triggered (or immediately after if situation does not allow for prior notification). The DCC Supervisor will notify Distribution Dispatchers not to respond to breaker activity.			

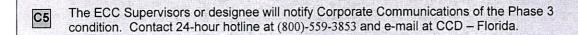
<sup>\*\*</sup> Steps noted "As Needed" are dependent upon the current and expected system conditions. These steps may be addressed multiple times in each phase of the GLRP.

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<sup>\*</sup> Steps noted as "Optional" are dependent upon how far DEF is expected to progress into the various phases of the GLRP on a real time or contingency basis. If the step is not implemented during this phase of the plan, it will need to be addressed in subsequent phases of the plan.

#### 9 Phase 3 Capacity Emergency Procedure

C8



The GSO will curtail all DEF non-firm sales and notify the purchasing entities that curtailments are being implemented (non-firm sales cannot be cut within 15 minutes of a DCS call but may be cut after 15 minutes if DEF has a continuing capacity shortage).

The ECC Supervisors or designee will declare a Phase 3 Generating Capacity Emergency condition by initiating a Phase 3 Emergency in the DSM system and the Phase 3 strategy in the DSM program. For targeted (regional) IS/CS activation, do not use CENS system but call DSM management for targeted notification by manual means. This action will be taken as soon as it can be determined that IS/CS customer interruptions are unavoidable in order to provide advance notice of interruptions.

The CENS will automatically send the 'Phase 3' notification messages to internal DEF personnel and IS/CS customers. This action initiates text and fax messages and turns on the customers' CENS box notification panel light (red light on), indicating that power curtailments are imminent.

When IS customers receive notification of a Phase 3 Emergency, they must reduce their load to zero. They also know that DEF will curtail their load as necessary by opening breakers and/or switches within a very short time.

When CS customers receive notification of a Phase 3 Emergency, they must reduce their loads to their non-curtailable demand level.

The ECC Supervisors or designee will update the GLRP System Status web page for the Phase 3 Emergency (Appendix F).

As Needed\*: If expected to progress to Phase 4 (or beyond) of the GLRP, notify FRCC SCEC(via RC) of system conditions. The GSO will notify the FRCC Reliability Coordinator (RC) of the current and future system conditions using the FRCC HOTLINE or at (305) 442-5748 if the HOTLINE is inoperable.

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<sup>\*</sup> Steps noted as "Optional" are dependent upon how far DEF is expected to progress into the various phases of the GLRP on a real time or contingency basis. If the step is not implemented during this phase of the plan, it will need to be addressed in subsequent phases of the plan.

<sup>\*\*</sup> Steps noted "As Needed" are dependent upon the current and expected system conditions. These steps may be addressed multiple times in each phase of the GLRP.

#### 9 Phase 3 Capacity Emergency Procedure (Continued)

C10

The ECC Supervisor will notify the GSO and TSO to interrupt service to IS/CS customers. If possible, interruption should occur at least one hour after declaring a Phase 1 Emergency condition. However, interruption can be activated with less notice when required by system conditions.



The GSO initiates IS/CS customer interruptions by activating the required DSM 'LM IS/CS TRIP' group strategy. IS/CS customers are divided into three letter Groups, A, B and C. The GSO will need to press the "Start Phase 3" button and then initiate the corresponding letter group strategy in the DSM program to trip each of the three letter groups.

The CENS will automatically send the 'Phase 3' notification messages to internal DEF personnel and the affected group (A, B or C) of IS/CS customers indicating that IS/CS customer load interruptions have begun.

\*If the trip order of IS/CS customers is group A followed by B and C then the restoration order should also be A, B, C. The next time IS/CS are tripped then the order will be B, C, A.

15

The TSO also checks each IS/CS customer's under-frequency relay to ensure it has tripped in the EMS System. Trip under-frequency relays and/or opens switches by supervisory control to any IS/CS customer group as required.

The CENS will automatically send the 'Phase 3' notification messages to internal DEF personnel and the affected group (A, B or C) of IS/CS customers indicating that IS/CS customer load interruptions have begun.

\*If the trip order of IS/CS customers is group A followed by B and C then the restoration order should also be A, B, C. The next time IS/CS are tripped then the order will be B, C, A.

C11

The ECC Supervisors or designee will notify the Manager, CIG Account Management that IS/CS customers have been interrupted. Contacts are

Primary: Nancy Loehr

Office: 230-4400 Office: 230-4442

Backup: Tom Artau

The regional CIG representatives will verify that all interruptible loads have been tripped by contacting IS/CS customers to verify compliance with the procedures. When required, field personnel will be dispatched to customer sites to ensure that the flow of power has been interrupted.

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<sup>\*</sup> Steps noted as "Optional" are dependent upon how far DEF is expected to progress into the various phases of the GLRP on a real time or contingency basis. If the step is not implemented during this phase of the plan, it will need to be addressed in subsequent phases of the plan.

<sup>\*\*</sup> Steps noted "As Needed" are dependent upon the current and expected system conditions. These steps may be addressed multiple times in each phase of the GLRP.

#### 9 Phase 3 Capacity Emergency Procedure (Continued)

C12

Optional\*: The Director of ECC or designee will ask for implementation of Environmental Communications Plan (ECP). Brief Senior Management on generation/environmental compliance status if time permits.

Doug Yowell

Office 230-5228

Patricia West

Office 230-5739

C13

The GSO will coordinate with and among adjacent Transmission Operators and Balancing Authorities. The GSO will monitor the status of neighboring utility systems by monitoring FTMS entries and by direct communication with system operators in neighboring systems in order to maintain situational awareness of the regional availability of generation.

C14

Optional\*: If it is determined that DEF will advance into Phase 5 the ECC Supervisor will contact FPL and see if FPL can carry the DEF reserves. If FPL can carry the reserves then the ECC Supervisor will contact Portfolio Management and have them make the formal arrangements.

<sup>\*</sup> Steps noted as "Optional" are dependent upon how far DEF is expected to progress into the various phases of the GLRP on a real time or contingency basis. If the step is not implemented during this phase of the plan, it will need to be addressed in subsequent phases of the plan.

<sup>\*\*</sup> Steps noted "As Needed" are dependent upon the current and expected system conditions. These steps may be addressed multiple times in each phase of the GLRP.

## 10 Phase 4 Capacity Emergency Procedure

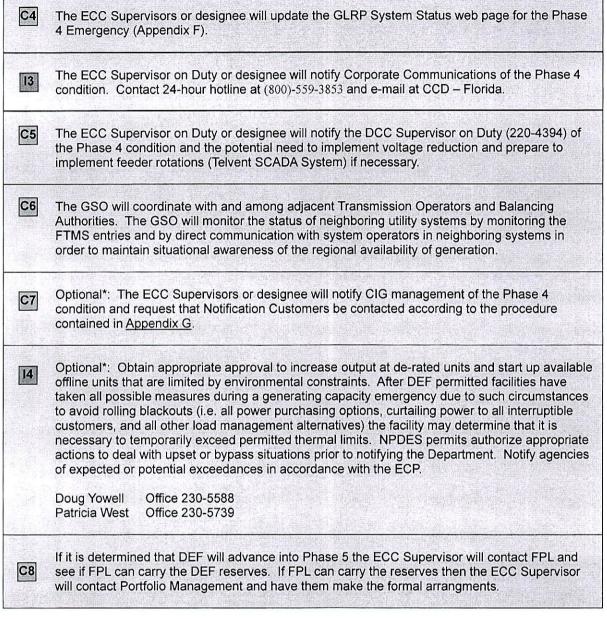
	A Phase 4 Capacity Emergency is declared when emergency purchases begin to support firm load or no emergency purchases are available and DEF is using its reserves to serve firm load DEF may or may not be able to maintain Operating and Regulating Reserves.					
Communication and Implementation Steps						
	eneration System Operator (GSO) Transmission System Operator (TS					
E	CC Supervisor or designee (GSO or TSO) Management					
<b>C1</b>	The ECC Supervisor on Duty or designee will provide notification that a Phase 4 Capacity Emergency has been declared to the, Director of Energy Control (or designee), Manager Transmission Services, ECC Compliance Program Leader, and DEF operations and field personnel using the system mailing list "TOP ECC FL GLRP-TXT" for text messages and "TOP ECC FL GLRP-EM" for e-mail messages.					
	Glenn Dooley Office 220-4180 ECC Supervisors Office 220-4818 Lee Schuster Office 220-4981 Paul Schmitt Office 220-4350					
11	The ECC Supervisor on Duty or designee will contact Power Marketing to request the purchase of the required amount of emergency power from neighboring utilities to avoid the interruption of firm load. Emergency power may be purchased under provisions of filed interchange contracts (see <u>Appendix E</u> for a summary of terms and conditions).					
C2	As Needed**: The ECC Supervisor on Duty or designee will contact over the FRCC Hotline (a recorded line must be used) the FRCC Reliability Coordinator (RC) and request that an Energy Emergency Alert Level 2 be declared for Duke Energy Florida. The GSO will notify the FRCC Reliability Coordinator (RC) of the current and future system conditions using the FRCC HOTLINE or at (305) 442-5748 if the HOTLINE is inoperable.					
C3	If the SCEC has declared a Generating Capacity Alert or Generating Capacity Emergency for the state, the ECC Supervisors or designee will notify the SCEC of DEF's dependence on emergency power purchases at this time.					
Technical and the second of th	The ECC Supervisors or designee will declare a Phase 4 Generating Capacity Emergency condition by initiating a Phase 4 Emergency in the DSM system and the Phase 4 strategy in the DSM program. The CENS will automatically send the 'Phase 4' notification messages to internal DEF personnel and IS/CS customers.					

<sup>\*\*</sup> Steps noted "As Needed" are dependent upon the current and expected system conditions. These steps may be addressed multiple times in each phase of the GLRP.

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<sup>\*</sup> Steps noted as "Optional" are dependent upon how far DEF is expected to progress into the various phases of the GLRP on a real time or contingency basis. If the step is not implemented during this phase of the plan, it will need to be addressed in subsequent phases of the plan.

#### 10 Phase 4 Capacity Emergency Procedure (continued)



<sup>\*</sup> Steps noted as "Optional" are dependent upon how far DEF is expected to progress into the various phases of the GLRP on a real time or contingency basis. If the step is not implemented during this phase of the plan, it will need to be addressed in subsequent phases of the plan.

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<sup>\*\*</sup> Steps noted "As Needed" are dependent upon the current and expected system conditions. These steps may be addressed multiple times in each phase of the GLRP.

#### 10 Phase 4 Capacity Emergency Procedure (continued)



The TSO will consult with the Supervisor on Duty (or designee) about starting the ECC generator. If it is decided to start the generator then the TSO will start it from EMS.

- Bring up "KENN" on EMS
- · Click on one of the distribution feeds
- Click "ECC" bottom center of one-line
- Click "STOPPED" button (top right) and follow prompts to start generator

If the generator does not start, contact SPAC.



The GSO will activate standby generation under the DSM Standby Generation strategy, consisting of approximately 82 MW of generation.

Per our General Service Load Management Standby Generation agreement, requests by DEF for the customer to reduce facility demand by operation of their standby generation can occur at any time during the day, but will not be operated more than twice each day with the total operation not exceeding 12 hours, Under extreme emergency conditions, DEF may request the customer to voluntarily operate their standby generation for periods longer than 12 hours.

<sup>\*</sup> Steps noted as "Optional" are dependent upon how far DEF is expected to progress into the various phases of the GLRP on a real time or contingency basis. If the step is not implemented during this phase of the plan, it will need to be addressed in subsequent phases of the plan.

<sup>\*\*</sup> Steps noted "As Needed" are dependent upon the current and expected system conditions. These steps may be addressed multiple times in each phase of the GLRP.

#### 11 Phase 5 Capacity Emergency Procedure

	quisites:					
	A Phase 5 Capacity Emergency is declared when firm load will have to be curtailed in order to balance the load with available capacity. DEF is not able to maintain Operating and Regulating Reserves.					
G	eneration System	od Implementation Steps Operator (GSO) Transmission System Operator (TSO designee (GSO or TSO) Management				
<b>C1</b>	Emergency has been Transmission Service	on Duty or designee will provide notification that a Phase 5 Capacity declared to the, Director of Energy Control (or designee), Manager es, ECC Compliance Program Leader, and DEF operations and field system mailing list "TOP ECC FL GLRP-TXT" for text messages and "TOP or e-mail messages.				
	Glenn Dooley ECC Supervisors Lee Schuster Paul Schmitt	Office 220-4180 Office 220-4818 Office 220-4981 Office 220-4350				
C2	The GSO will notify the HOTLINE or at (305)	ne FRCC Reliability Coordinator (RC) of the situation using the FRCC 442-5748 if HOTLINE inoperable.				
	up against the need to Level 3 in accordance Operating Reserves ( load prior to interrupti carrying its required 0 should not cut firm load resources and load of	the RC that DEF can no longer carry Operating Reserves (because DEF is o shed firm load), request the the RC declare an Energy Emergency Alert with EOP-002, and will follow RC directions. Then DEF will begin using spinning and non-spinning) and if needed Regulating Reserves to serve ng firm load. If a reserve call is made during the period that DEF is not Operating Reserves, the call will be met by cutting firm load. However, DEF and if neighboring utilities have mitigation measures available to balance ther than cutting firm load. Operating reserves will be restored as soon as becomes available or load is reduced by a sufficient amount.				
M	condition by initiating DSM program. When	s or designee will declare a Phase 5 Generating Capacity Emergency a Phase 5 Emergency in the DSM system and the Phase 5 strategy in the ever possible, the ECC will provide a thirty-minute notice to the DCC efore initiating the interruption of firm load in the Telvent SCADA System.				
	The CENS w personnel an	ill automatically send the 'Phase 5' notification messages to internal DEF d IS/CS customers.				

<sup>\*\*</sup> Steps noted "As Needed" are dependent upon the current and expected system conditions. These steps may be addressed multiple times in each phase of the GLRP.

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<sup>\*</sup> Steps noted as "Optional" are dependent upon how far DEF is expected to progress into the various phases of the GLRP on a real time or contingency basis. If the step is not implemented during this phase of the plan, it will need to be addressed in subsequent phases of the plan.

#### 11 Phase 5 Capacity Emergency Procedure (Continued)

C4

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The ECC Supervisors or designee will update the GLRP System Status web page for the Phase 5 Alert (Appendix F).

As Needed\*\*: The ECC Supervisor on Duty or designee will contact the RC over the FRCC Hotline (a recorded line must be used) FRCC Reliability Coordinator (RC) and request that an Energy Emergency Alert Level 3 be declared for Duke Energy Florida. The GSO will notify the FRCC Reliability Coordinator (at least every hour) of the current and future system conditions using the FRCC HOTLINE or at (305) 442-5748 if the HOTLINE is inoperable.

The ECC Supervisors or designee will notify Corporate Communications of the Phase 5 condition and request that Corporate Communications begin notification to DEF internal personnel and the public that it will be necessary to curtail power to firm customers. Corporate Communications will also continue public appeals for conservation and internal communications to curtail internal DEF load. Contact 24-hour hotline at (800)-559-3853 and e-mail at CCD - Florida

The ECC Supervisor or designee will notify the DCC Supervisor on Duty (220-4394) of the Phase 5 condition and direct DCC to implement feeder rotation (AREVA program activation).

DCC dispatchers will follow their respective emergency plans for firm load reductions. When implementing firm load reductions, notification customers will only be included in the rolling blackouts after they have been notified.

In the event that the DCC is not able to implement feeder rotation the TSO will so that the DEF ACE returns to zero. This is required by NERC Standard EOP-002.

The ECC Supervisors or designee will contact the Director of Renewable Generation and Wholesale Power who in turn will notify appropriate personnel to request that wholesale customers curtail their load in proportion to our curtailments.

Primary: Michael A. Carl Office: 230-4530
Backup: John A. Warner Office: 230-4528
Kimberly Futch Office: 220-6554

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<sup>\*</sup> Steps noted as "Optional" are dependent upon how far DEF is expected to progress into the various phases of the GLRP on a real time or contingency basis. If the step is not implemented during this phase of the plan, it will need to be addressed in subsequent phases of the plan.

<sup>\*\*</sup> Steps noted "As Needed" are dependent upon the current and expected system conditions. These steps may be addressed multiple times in each phase of the GLRP.

#### 11 Phase 5 Capacity Emergency Procedure (Continued)



The ECC Supervisors or designee will contact the Seminole Electric Cooperative directly and that their contractual supplemental purchases are to be reduced in proportion to DEF firm load curtailment.

<sup>\*</sup> Steps noted as "Optional" are dependent upon how far DEF is expected to progress into the various phases of the GLRP on a real time or contingency basis. If the step is not implemented during this phase of the plan, it will need to be addressed in subsequent phases of the plan.

** Steps noted "As Needed" are dependent upon the current and expected system conditions.	These steps may be addressed
multiple times in each phase of the GLRP.	3

#### 12 Phase 6 Termination of a Generating Capacity Emergency

- 12.1 The ECC Supervisor on Duty, Director ECC or designee will determine when the current capacity emergency conditions can be reduced or terminated. The ECC Supervisor On Duty will direct a dispatcher to adjust the "General Load Reduction and System Restoration Status" page to show that the current status is "Phase 6 Restoration in Progress." In general, the phases of this plan will be discontinued in reverse order as conditions permit.
- 12.2 The CENS will provide full communications capabilities to DEF personnel and IS/CS customers when each Phase is terminated. The appropriate contacts in the Communications Chart should also be notified when each Phase is terminated.
- **12.3** The ECC Supervisor on Duty, Director ECC or designee will notify the RC that the capacity emergency has been reduced or terminated.
- 12.4 If firm load has been interrupted on a rotating basis, the ECC Supervisors or designee will coordinate load restoration activities with the DCC Supervisor and field CIG representatives.

#### 13 Plan Revisions, Drills and System Testing

This Plan will be reviewed annually and revised as needed by the Florida ECC. Each department with responsibilities under the Plan should review and update its portion at least annually by December 1 of each year. The annual review of the plan shall include a review of the applicable elements of NERC standards EOP-001 and EOP-005. Any proposed revisions to the Plan should be submitted to the Director Energy Control Florida by December 1 of each year. In addition, the following periodic drills and tests are conducted:

- **13.1** DEF participates in an annual capacity emergency drill sponsored by the FRCC and conducted by the SCEC.
- **13.2** The Florida ECC dispatchers participate in a yearly training/drill of this plan. This is implemented by the trainers at the Florida ECC.
- 13.3 The AREVA load shedding system is updated and tested twice each year prior to DEF's winter and summer peak load seasons.
- 13.4 The Capacity Emergency Notification System (CENS) functionality is tested on a weekly basis using a message generated automatically by the CENS.

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13.5 Prior to the Winter and Summer peak-load periods each year, review the current Plan and determine the training/review needed by employees. Factors such as personnel changes, past experience, and significant Plan revisions should be considered to determine what training may be needed. Each manager is responsible for seeing that indicated training and reviews are carried out.

#### 14 Definitions

#### 14.1 Definition of Abbreviations

AREVA	AREVA Energy Management System (EMS / SCADA)
CCD	Corporate Communications Department
CENS	Capacity Emergency Notification System
CIG	Commercial, Industrial and Governmental
CT	Combustion Turbines
DCC	Distribution Control Center
DOE	Department of Energy
DSM	Demand Side Management
ECC	Energy Control Center
ECP	Environmental Communications Plan
EEA	Energy Emergency Alert
EIS	Emergency Interchange Service
EMS	Energy Management System
FPL	Florida Power & Light
FPSC	Florida Public Service Commission
FRCC	Florida Reliability Coordinating Council
FTMS	Florida Transaction Management System
GSO	Generation System Operator
HVAC	Heating Ventilating Air Conditioning
IS/CS	Interruptible and curtailable customers
LM	Load Management
NERC	North American Electric Reliability Corporation
NIPC	National Infrastructure Protection Center
DEF	Duke Energy Florida
RC	Reliability Coordinator
RPM	Regulated Portfolio Management
SCEC	State Capacity Emergency Coordinator
SIL	Surge Impedance Loading
SORMF	System Operator Reference Manual – Florida
SPAC	System Protection and Control
TECO	Tampa Electric Company
TOPD	Transmission Operations and Planning Department
TSO	Transmission System Operator
VAR	Volt-Amperes Reactive
200 200 W	

#### 14.2 Definition of NERC Energy Emergency Alert Levels

North American Electric Reliability Corporation (NERC) Standard IRO-001-1 R1 requires Reliability Coordinators to continuously assess transmission security and coordinate emergency operations among the balancing authorities within the sub-regions, regions and across regional boundaries.

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To ensure that all Reliability Coordinators clearly understand potential and actual energy emergencies in the interconnection, NERC has established levels of Energy Emergency Alerts. The NERC definition of Energy Emergency Alert levels is provided below.

#### 14.2.1 Alert 1 - All Available Resources in Use

Foresee, or experiencing, conditions where all available resources are committed to meet firm load, firm transactions, and reserve commitments, and concerned about sustaining Operating Reserves. Non-firm energy sales have been curtailed.

#### 14.2.2 Alert 2 - Load Management Procedures in Effect

Foresee, or have implemented, procedures up to, but excluding, interruption of firm load commitments. Procedures may include public appeals, voltage reduction, activation of DSM, curtailment of non-firm load, and conservation measures.

#### 14.2.3 Alert 3 - Firm Load Interruption Imminent or in Progress

Foresee, or have implemented, firm load obligation interruption. Available energy, as determined from Alert 2, is only accessible with actions taken to increase transmission transfer capabilities.

#### 14.2.4 Alert 0 - Excess Resources Available

Reliability Coordinators use Alert 0 for termination of an Energy Emergency Alert, that is, when an Energy Emergency Alert has ended.

#### 14.3 Definition of FRCC Energy Emergency Alert Levels

The Florida Reliability Coordinating Council (FRCC) has in place a Generating Capacity Shortage Plan to document guidelines and procedures to be used by Florida's electric utilities in response to generating capacity shortages. The Plan defines the alert levels that may be declared on a state-wide basis in response to an actual or potential generating capacity emergency.

The SCEC is responsible for identifying and declaring any of the conditions defined in the FRCC plan. The Florida Transaction Management System (FTMS) is used by FRCC member utilities to provide the SCEC with a complete look at member's load forecast and reserve margin data. The levels defined in the FRCC plan are as follows:

#### 14.3.1 Generating Capacity Advisory

A Generating Capacity Advisory can be triggered by state weather projections and is primarily for information purposes. A Generating Capacity Advisory will be issued when: (1) temperature projections for up to three days in advance of the current date exceed temperature criteria in a prescribed number of cities; or (2) one or more utilities in an area are issuing or planning to issue public appeals for conservation or, (3) disruption of the gas pipelines serving the FRCC region may threaten to adversely affect the generating capacity of the FRCC region.

#### 14.3.2 Generating Capacity Alert

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A Generating Capacity Alert exists when: (1) the FRCC operating margin is such that the loss of the largest generating unit will necessitate interruptions of firm load in Florida; or (2) disruption of the gas pipeline(s) serving the FRCC region will adversely affect the generation capacity in the FRCC region. When issued, the ECC will take the following action.

- **14.3.2.1** If the alert is issued during the winter months the ECC will contact the appropriate power plant managers to request them to implement their freeze protection procedures.
- **14.3.2.2** The ECC will also contact the Corporate Communications 24-hour media line to make them aware of the situation.
- **14.3.2.3** It is the responsibility of the ECC to make initial notification to department heads as deemed appropriate should system conditions so warrant.
- **14.3.2.4** If the capacity emergency is fuel related, the ECC will contact the Fuels group to activate DEF's Fuel Emergency Plan to ensure that a sufficient fuel supply is on hand.

#### 14.3.3 Generating Capacity Emergency

A Generating Capacity Emergency exists when any one of the electric utilities in the FRCC region has inadequate generating capacity, including purchased power, to supply its firm load obligations. The loss of firm load in a localized area due to a transmission or distribution outage would not cause the implementation of the FRCC plan.

#### 14.3.4 System Load Restoration

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

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Recommend:

Paul E. Schmitt Sys Ops Compl Prog Ldr System Operations

### **APPROVED**

By Paul Schmitt at 10:46 am, Dec 30, 2013

Concur:

Lee G. Schuster Manager, Trans Services System Operations

## **APPROVED**

By Lee Schuster at 2:14 pm, Dec 30, 2013

Approve:

Glenn S. Dooley Director, Energy Control System Operations

#### **APPROVED**

By Glenn S. Dooley at 5:17 pm, Dec 30, 2013

#### AUTHORIZED COPY Appendix A

# Load Management Program Operating Guidelines Demand Side Management (DSM)

The Peak Periods (normal operating hours) for residential load management shall be, but are not limited to, the following time periods:

November 1 - March 31: 06:00 - 11:00 and 18:00 - 22:00 hours

April 1 - October 31: 13:00 - 22:00 hours

Access to the DSM load management control blocks is from the Generation desk PC workstation. A red light located near the upper left corner of the transmission map board will be illuminated when any block of DSM load management is operated.

To begin a session from the GSO PC workstation

- 1. Open up the Demand Response "Load Management Dispatch."
- 2. If needed refer to SORMF-GD-04: Load Management Program and Demand Side Response.
- 3. Apply appropriate amount and type of load management.

#### **Load Management Contact Information:**

Thomas A	Artau (Pr	rtau (Primary): <u>Doug Fusco (Backup)</u> <u>Paul Hatcherian (Backup</u>		<u>: Doug Fusco (Backup) Paul F</u>		Backup)		
Office:	(727	7) 518-3619	Office:	(727	7) 820-4645	Office:	(727	) 820-4489
	or	220-3619		or	230-4645		or	220-4489

Reference: Duke Energy Florida, Inc. Tariff for Retail Electric Service, Section VI, Rate Schedules RSL-1 and RSL-2.

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# Demand Side Management Program Capacity Emergency Notification System (CENS) Messages

The first and the first descript the first to the first and the first to the first the first to
LM Phase 1 - Capacity Alert order-of-day ABC
LM Phase 1 - Capacity Alert order-of-day BCA
LM Phase 1 - Capacity Alert order-of-day CAB
LM Phase 1 - has Ended
LM Phase 2 - has Begun Purchasing Power Call 800-791-1024 for cost
LM Phase 2 - has Ended
LM Phase 3 - has Begun Interruption in Effect, standby for Group identification
LM Phase 3 - has Ended (Power has been Restored)
LM Phase 3 - Group A has been Interrupted
LM Phase 3 - Group A has been Restored
LM Phase 3 - Group B has been Interrupted
LM Phase 3 - Group B has been Restored
LM Phase 3 - Group C has been Interrupted
LM Phase 3 - Group C has been Restored
LM Phase 4 - Capacity Emergency has Begun
LM Phase 4 - has Ended
LM Phase 5 - Capacity Emergency has Begun
LM Phase 5 - has Ended
LM Standby Generation has Begun
LM Standby Generation has Ended

#### AUTHORIZED COPY Appendix C

#### **Load Shed Program Overview**

All bulk power electric systems in North America operate so that the last action taken to avoid a complete system collapse (blackout) is to shed firm load. Shedding of firm load is usually automated through special protection systems and under-frequency programs designed to prevent uncontrolled cascading outages or a total system blackout following a severe contingency. If at all possible, the TSO will provide at least a thirty-minute (30) advance notification to the DCC Supervisor prior to implementing the AREVA program to give them sufficient time to prepare for feeder rotation.

Operating instructions for the AREVA load shed program are contained in SORMF-TD-06 (\\s00233\grpdata\Transop\SORM-Florida\Sormf PDF Copies\TD-06-Procedure.pdf)), which provides a quick reference and a summary of the operating instructions along with a description of the general functionality of the load shed program. These instructions are intended for the use of an experienced TSO who has previously received hands-on program training. SORMF-TD-06 should serve as the primary reference for the Transmission System Operator when operating the load shed program. However, if there are any technical difficulties with the AREVA load shed program please contact Randall Miranda of Distribution Grid Management and Operations or the DCC Supervisor on duty.

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# Duke Energy Florida General Load Reduction Plan

# Corporate Communication Responsibilities Load-reduction communications plan

When customer demand exceeds DEF's ability to provide service through company generation and wholesale purchases, DEF may pursue one of several options to balance supply and demand. These are used when required to preserve a balance between system resources and load. These actions require considerable communication to the public and employees. In such an event, the Corporate Communications Department (CCD) will respond according to the following basic guidelines:

- Upon notification of implementation of any phase of the load reduction plan from the Vice President-TOPD or designee, the CCD 24 hour media contact person (contacted at (800-559-3853) will notify the Director of Utility Communications. The Director of Utility Communications, will convene a brief meeting with all available media and employee communications staff and review the DEF load reduction plan. Messages should also be emailed to Corporate Communications at CCD-Media Relations Team, CCD-Employee Communications and CCD-Florida.
- 2. Phases of the Plan, and corresponding internal notifications, press releases and radio ads are as follows. If the situation escalates quickly, it may be necessary to combine one or more levels in these communications.

CCD's action steps are summarized below. More details are included in the rest of this plan.

- <u>Contingency Alert</u>: A heads-up that all resources are expected to be in use. **Notification** required by e-mail; copy attached. Additional information of internal interest may be
   added.
- System Alert: An internal to DEF ONLY alert so as DEF Operations and Field Personnel
  can prepare for further phases of the GLRP. None of the information contained in the
  System Alert is to be distributed to customers, other electrical entities or regulatory
  agencies. Notification required by e-mail; copy attached. Additional information of
  internal interest may be added.
- <u>Phase 1 Alert</u>: A heads-up that all resources are in use. **Notification required** by e-mail; copy attached. Additional information of internal interest may be added.
- <u>Phase 2 Emergency</u>: **Notification required** by e-mail; copy attached. Additional information of internal interest may be added.
- <u>Phase 3 Emergency</u>: **Notification required** by e- mail; copy attached. Additional information of internal interest may be added.

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- <u>Phase 4 Emergency</u>: **Notification required** by e- mail; copy attached. Additional information of internal interest may be added. **Public appeal news release required to be issued**. Social media maybe leveraged. **Consider activating emergency radio advertising plan.**
- <u>Phase 5 Emergency</u>: Rotating power outages. **Notification required** by e-mail; copy attached. Additional information of internal interest may be added. **Power rotation news release required to be issued.** Leverage social media. **Activate emergency radio advertising plan.**
- <u>Phase 6 System Restoration</u>: Restoration of power following outages. **Notification required** by e-mail; copy attached. Additional information of internal interest may be added. **News release required**. This requires writing from scratch and dissemination by phone calls to broadcast media. **Activate emergency radio advertising plan**.
- 3. Using information provided by Vice President TOPD or designee, the Florida Media Spokesperson or designee will prepare and issue appropriate news releases to news media, using prioritized list below. These releases may be electronically distributed through PRNewswire and/or Vocus, except possibly system restoration events where electronic distribution may not be feasible due to not having power. The Spokesperson will also ensure appropriate information is communicated via social media on the Fla. utility's Facebook and Twitter channels.

#### Associated Press

Florida news networks (radio and print/electronic) Service area newspapers, radio outlets and TV stations Twitter and Facebook social media sites as appropriate

- 4. Florida Media Spokesperson or designee will electronically distribute copies of all news releases and radio spots to region vice presidents, local Community Resource Managers (CRMs), Customer Service Center management (CSC), region E&O managers, Director Commercial, Industrial and Government Account Management, Transmission Planning Unit and administrative assistant to assist in communications with local customers and media.
- 5. As any Phase of the load-reduction plan is implemented, the Manager-Employee Communications (based in Charlotte) or designee will issue a notification to employees, using information contained in the corresponding news release.
- 6. The Florida Media Spokesperson will engage the Director Utility Communications. The Director Utility Communications will work with the Manager of Creative Services to ensure contact with storm plan radio stations to air appropriate 30-second radio advertisements at precontracted intervals. Pre-written messages designed to be used during phases 4 and 5 of a capacity emergency are attached. These messages may be edited by CCD.
- 7. Director, Utility Communications, and staff will contact broadcast media in service area (as listed in CCD crisis communications plan) to notify them of the emergency and DEF's response. CCD staff will conduct interviews as needed. Key messages will include: (1) the reason for the action, (2) description of the desired customer response, and (3) expected duration of the action.

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- 8. CRMs may assist with communications by making follow-up phone calls to local radio stations, if requested by Corporate Communications to ensure receipt of news releases and radio spots. While all radio stations in our service area should receive the news releases, only those listed in the CCD storm plan's emergency advertising section will receive the radio spots.
- 9. At the termination of the load reduction event, Florida Media Spokesperson or designee will issue a news release to the media, and Manager Employee Communications or designee will issue a notification of event termination to employees.
- 10. A CCD communication support staff will reserve a meet-me line for conference calls with region VPs, CRMs, CSC, Regulatory Affairs and Director CIG Account Management or designee. Call scheduled by Manager of Utility Communications or CCD VP.
- 11. The CCD-Florida communication specialist will confirm/update distribution list for item # 3 and share with all CCD personnel who may be in a position to share releases, radio spots or other materials with this group.

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#### **Notifications to Department Heads and Internal Employees**

The following capacity alert and emergency notifications are to be sent to department heads, their administrative assistants and the Community Relations Managers by Director, Florida Communications, after proper notification from the ECC. These notifications are also be distributed by Employee Communications to DEF employees. **Test link before sending.** Specify if we are issuing a public appeal. If reference is made to curtailable customers, use this language: The company has asked (or expects to ask) curtailable industrial customers to reduce their electricity usage to agreed-upon levels for which we have contracted.

#### System Alert Phase:

Email subject line: GLRP System Alert (For internal use only)

Text of email: This is a DEF Internal Alert Only and not to be sent out to customers or regulatory agencies. Its purpose is to give advance notice to DEF operations and field personnel so as to prepare for potential further phases of the GLRP. To monitor the company's response to today's heavy load, click on this link: http://feccweb/glrp/SystemStatus.asp

#### Phase 1:

Email subject line: Implementing GLRP Phase 1 (Anticipate Curtailing Certain Customers)
Text of email: Due to heavy customer load, Duke Energy Florida has implemented a Phase 1 Alert of the General Load Reduction Plan. This means the company anticipates curtailing our interruptible/curtailable customers if needed. No action is necessary on your part at this point, but be advised that conditions may worsen. To monitor the company's response to today's heavy load, click on this link: http://feccweb/glrp/SystemStatus.asp

#### Phase 2:

Email subject line: Implementing GLRP Phase 2 (Purchasing Power)

Text of email: Due to heavy customer load, Duke Energy Florida has implemented Phase 2 of the General Load Reduction Plan. This means the company is purchasing power for our interruptible/curtailable customers. Be advised that conditions may worsen. To monitor the company's response to today's heavy load, click on this link: http://feccweb/glrp/SystemStatus.asp

#### Phase 3:

Email subject line: Implementing GLRP Phase 3 (Curtailed Certain Customers)

Text of email: Due to heavy customer load, Duke Energy Florida has implemented Phase 3 of the General Load Reduction Plan. This means the company has curtailed our interruptible/curtailable customers. Be advised that conditions may worsen. To monitor the company's response to today's heavy load, click on this link: http://feccweb/glrp/SystemStatus.asp

#### Phase 4:

Email subject line: Implementing GLRP Phase 4 (Public Appeal for Conservation)

Text of email: Due to heavy customer load, Duke Energy Florida has implemented Phase 4 of the General Load Reduction Plan, and we are making public appeals for conservation. In addition to requesting our customers reduce their energy use, the company is making emergency purchases of power to cover firm load. Please have your department's employees reduce all non-essential use of electricity immediately and until further notice. Be advised that conditions may worsen. To monitor the company's response to today's heavy load, click on this link:

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## http://feccweb/glrp/SystemStatus.asp

#### Phase 5:

Email subject line: Implementing GLRP Phase 5 (Rotating Outages)

Text of email: Due to heavy customer load, Duke Energy Florida has found it necessary to temporarily curtail service to firm customers. Duke Energy Florida has implemented Phase 5 of General Load Reduction Plan, and we are rotating outages among our customers. To monitor the company's response to today's heavy load, click on this link: http://feccweb/glrp/SystemStatus.asp

#### Phase 6:

Email subject line: Implementing GLRP Phase 6 (Restoration)

Text of email: Duke Energy Florida has implemented Phase 6 of the General Load Reduction Plan, and we are currently restoring the system. To monitor the company's response to today's heavy load, click on this link: http://feccweb/glrp/SystemStatus.asp

#### Load reduction radio advertisements

These radio messages may be edited to reflect specific details of the situation. These radio ads are activated according to the CCD storm plan's emergency advertising plan. Highlighted areas require specific information.

#### **Phase 4 Emergency Radio Spot:**

30-second radio ad seeking customer curtailment of electricity usage

Duke Energy Florida asks customers to reduce use of electricity (date)

Due to the high demand for electricity, Duke Energy Florida is asking customers to reduce their use of electricity (specify during what time period for example "from 4-7 pm"). By doing so, you can help ensure an uninterrupted flow of power to all customers. Once the extreme weather passes, normal power usage can be resumed.

Customers are asked to turn off unnecessary lights and postpone household chores that involve the use of electrical equipment until after 9 p.m. Customers can monitor the power situation by tuning in to this radio station or following Duke Energy Florida on Twitter and Facebook. Thank you for your patience.

#### Phase 5 Emergency Radio Spot

30-second radio ad announcing rotating outages

Duke Energy Florida begins rotating available power among customers (date)

Due to the continuing record demand for electricity, Duke Energy Florida is temporarily rotating power outages in the area (specify during what time period for example "from 4-7 pm"). With neighboring utilities experiencing the same record demand, this is the only way to maintain the stability of the electric system while continuing to provide power to customers.

Customers will experience periodic power interruptions of about (must specify) one hour (summer)/30 minutes (winter) until the power demand and availability are again balanced. By rotating power, Duke Energy Florida can share what electricity is available among all customers. If your power is off for much longer than (must specify) one hour/ 30 minutes, please call Duke Energy Florida to report it. Thank you for your patience.

# ALL NEWS RELEASE TEMPLATES ARE FOUND ON THE SHAREPOINT SITE AT:

https://team.duke-

<u>energy.com/sites/CorporateCommunications/Regional/Forms/AllItems.aspx?RootFolder=%2Fsites%2FCorporateCommunications%2FRegional%2FFlorida%2FGLRP%2F2012</u>

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City of Homestead (HST)	Contact: Interchange Desk (305) 247-3548
	Key Terms:
	Duration less than 1 hour treated as inadvertent However, CT energy may be treated as EIS Duration over 1 hour treated as EIS Maximum term is 72 hours
City of Lakeland	Contact: Interchange Desk (863) 834-8550
	Key Terms:
	Duration less than 1 hour treated as inadvertent However, CT energy may be treated as EIS Duration over 1 hour treated as EIS Maximum term is 72 hours
City of Tallahassee	Contact: Marketing function will arrange for purchases except in the case of an emergency:
	Marketing Desk (850) 891-6891 or -6897 or -6898 Interchange Desk (850) 891-3018
	Key Terms:
	Requirements: All non-firm sales curtailed, all DSM implemented, all available generation on-line
	Duration less than 1 hour treated as inadvertent However, CT energy may be treated as EIS Duration over 1 hour treated as EIS Maximum term is 24 hours
Florida Municipal Power Pool (FMPP)	Contact: Marketing function will arrange for purchases except in the case of an emergency:
	Marketing Desk (407) 384-4380 Interchange Desk (407) 384-4045
	Key Terms:
	Requirements: None, if they have excess power available they will provide it.
	Duration less than 1 hour treated as inadvertent However, CT energy may be treated as EIS Duration over 1 hour treated as EIS Maximum term is 72 hours

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Contact: Marketing function will arrange for purchases except in the case of an emergency:	
Marketing Desk (561) 625-7000 Interchange Desk (305) 334-2892	
Key Terms:	
Service available to serve firm native load  DEF must first fully implement all DSM  DEF must first fully interrupt all non-firm load  Or, DEF can buy to support non-firm load, but	
FPL not obligated to provide more than lost resource Maximum term is 72 hours	
Second event within 48 hours shall not qualify as EIS Energy provided is non-firm and recallable by FPL	
Contact: Marketing function will arrange for purchases except in the case of an emergency:	
Marketing Desk(TEA) (904) 360-1413 or -1408 or -1406 Interchange Desk (352) 334-2892	
Key Terms:	
Requirements: None, if they have excess power available they will provide it.	
Duration less than 1 hour treated as inadvertent However, CT energy may be treated as EIS Duration over 1 hour treated as EIS Maximum term is 72 hours	
Contact: Interchange Desk (904) 665-7150	
Key Terms:	
Duration less than 1 hour treated as inadvertent However, CT energy may be treated as EIS Duration over 1 hour treated as EIS Maximum term is 72 hours	

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New Smyrna Beach (NSB)	Contact: Transactions will be arranged between DEF marketing and the NSB system operator except in the case of an emergency.  Interchange Desk (386) 424-3163 Marketing Desk (386) 424-2705  Key Terms:  Requirements: None, if they have excess power available they will provide it.  Duration less than 1 hour treated as inadvertent However, CT energy may be treated as EIS Duration over 1 hour treated as EIS Maximum term is 72 hours
Orlando Utilities Commission (OUC)	Contact: Interchange Desk (407) 384-4045  Key Terms:  Duration less than 1 hour treated as inadvertent However, CT energy may be treated as EIS Duration over 1 hour treated as EIS Maximum term is 72 hours
Reedy Creek Improvement District (RCI)	Contact: Marketing function will arrange transactions during normal business hours Monday through Friday. Interchange desk will handle these requests on nights and weekends. Emergency requests will be handled by the operator on duty.  Marketing Desk (407) 824-4867 Interchange Desk (407) 934-2929  Key Terms:  Duration less than 1 hour treated as inadvertent However, CT or diesel energy may be treated as EIS Duration over 1 hour treated as EIS Maximum term is 24 hours

Seminole Electric Cooperative, Inc. (SECI)	Contact: Marketing function or system operator can arrange transactions.  Marketing Desk (ACES) (919) 654-8270 Interchange Desk (813) 739-1263 or 963-2844  Key Terms:  Requirements: All non-firm sales curtailed, all DSM implemented, all available generation on-line  Duration less than 1 hour treated as inadvertent However, CT energy may be treated as EIS Duration over 1 hour treated as EIS Maximum term is 24 hours	
Southern Company Services, Inc.	ntact: Contact the SERC Reliability Coordinator either directly or ough the FRCC Reliability Coordinator to request emergency ergy from SOCO.  y Terms:	
	Requirements: All available generation on-line, available purchases have been made regardless of cost, all non-firm sales recalled, all interruptible load curtailed, all DSM activated, Operating Reserves utilized to serve load or reserve call active.	
	Emergency assistance shall not exceed reasonable time for receiving party to replace capacity deficiency and may be terminated by the supplying party after 24 hours.	
Tampa Electric Company	Contact: Marketing function will arrange for purchases except in the case of an emergency:	
	Marketing Desk (813) 226-3197 Interchange Desk (813) 623-5623	
	Key Terms:	
	Requirements: All non-firm sales curtailed, all DSM implemented, all available generation on-line	
	Duration less than 1 hour treated as inadvertent Duration over 1 hour treated as EIS Maximum term is 72 hours	

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#### General Load Reduction Status Web Page

#### http://feccweb/glrp/SystemStatus.asp

Update Status

Plan Document
View DSM Details

View GLRP Mitigation Strategy

Current Status	Expect to Advance to Phase	Progress Energy Status	
V	V	Phase 0 - System Conditions Normal	
广图		Contingency Alert (Red Light On)	
广片特殊	Падара	System Alert (GLRP Activation Required)	
		Phase 1 Alert(IS/CS interruption probable)	
П	Г	Phase 2 Emergency (IS/CS Purchases)	
$\Gamma$		Phase 3 Emergency (IS/CS Curtailments)	
Γ		Phase 4 Emergency (Emergency Purchases for Firm Load)	
Г	П	Phase 5 Emergency (Firm Load Interruption)	
Γ		Phase 6 - Restoration in Progress	
		FRCC Status	
Г		FRCC Advisory	
Г	$\mathbf{L}_{i}$	FRCC Alert	
$\Gamma$	F	FRCC Emergency	
Current			
Status		Mitigation Measures Currently in Effect	
Γ	Non-firm sales curtailed		
	Curtailable and Interruptible Customers Notified		
_	System Voltage Reduction		
_	Pool Pump control activated Water Heater control activated		
Ę.	CONTRACTOR OF THE PARTY OF THE		
	HVAC control activated		
, L	Standby generation activated IS/CS Purchases in Effect		
F		e and interruptible customers interrupted	
, F		ental communications plan activated	
r		stomer Appeal	
, 		n-essential Progress Energy Florida Load	
Ë		y Purchases for Firm Load	
Ė	Operating reserves used to serve firm load		
Ē	Feeder Ro		

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#### Phase Five Firm Load Shed Notification Process

- 1. ECC System Operations notifies CIG management (Nancy Loehr (primary), Steve Rudolph (backup)) of a pending firm load shed event including identification of affected area of system (entire system or specific load shed areas). Notifications will be made in the areas designated for firm load shed The six load shed areas are as follows:
  - 1) Apopka-Longwood (APK, LNG)
  - Buena Vista-Lake Wales (BNV, BVA, CLR, HIL, LKW, LWL, WGN) 2)
  - Clearwater-Seven Springs (7SP, CLW, NSC, SEV, TRP, ZEP) 3)
  - 4) Jamestown-Deland (CNY, CWY, DEL, JAM)
  - 5) Ocala-Monticello (CEN, INV, MON, NOR, OCA)
  - 6) St. Petersburg-Walsingham (SSC, STP, WAL)
- 2. CIG management notifies the respective account executives who have assigned "notification" customers.
- 3. CIG account executives call their "notification" customer contacts.
- 4. CIG account executives document the customers that are notified of the impending load shed event.
- 5. CIG account executives provide this information back to CIG management.

#### **CIG Account Management Contact Information:**

Nancy Loehr (Primary): Steve Rudolph (Back-Up): Office: (727) 820-4400 Office: (863) 678-4451 or

230-4400 or 280-3451

#### **Duke Energy Internal Power Reduction Measures**

- 1. Reduce lighting to a minimum level to support required work.
- 2. Turn off water heaters and exterior irrigation systems.
- 3. During working hours, set thermostats to 60 degrees heating, 80 degrees cooling. Outside of normal working hours, set thermostats to 50 degrees heating, 85 degrees cooling (computer rooms and control rooms are exempt).
- 4. Turn off exterior lighting except where necessary for safety and security.
- 5. Turn off electrical appliances (coffee pots, water coolers, ice machines, refrigerators, space heaters, etc.)
- 6. Turn off personnel and freight elevators except to the extent necessary to operate facilities.
- 7. Discontinue use of welders, sand blasters and exhaust fans in shop areas except where necessary to maintain power plant operation.
- 8. Transfer load to backup generators where applicable.
- 9. If fuel inventory permits, deactivate the Bartow-Anclote pipeline
- 10. If fuel inventory permits, deactivate all or a portion of Crystal River coal handling facilities.