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FRCC GENERATING CAPACITY SHORTAGE PLAN

APPROVED BY FRCC BOARD OF DIRECTORS
SUBJECT TO ADOPTION BY FLORIDA PUBLIC SERVICE COMMISSION



FLORIDA RELIABILITY COORDINATING COUNCIL

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FRCC GENERATING CAPACITY SHORTAGE PLAN

INTRODUCTION

Electricity is a vital part of Florida's infrastructure. It is critical for the existing and growing residential population, for commerce and industry, and for tourism. Florida's electric utilities coordinate planning and operations to ensure adequacy and reliability of the electric system long-term. However, during periods of abnormal weather, in the event of multiple unanticipated generating outages, or during fuel supply or fuel availability constraints, there may be occasional times when load serving capacity is also constrained or falls below customer demand. The following plan was developed to facilitate coordinated actions among electric utilities and state and local agencies in the event of an anticipated or actual generating capacity shortage so as to protect the health, safety, and welfare of the people of Florida, consistent with good operating practices.

I. PURPOSE

The purpose of this plan is to document guidelines and summarize procedures to be used by Florida's electric utilities and governmental agencies in response to generating capacity shortages which impact or threaten to impact significant numbers of customers. Generating capacity shortages may be caused by unusually hot or cold weather, fuel supply shortages, transmission disruptions or plant outages.

II. DEFINITION

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

III. OVERVIEW

This Generating Capacity Shortage Plan is oriented toward energy emergencies caused by a generating capacity shortage. It is designed to provide a coordinated response to the various communications, environmental, legal, political and technical concerns which may arise on a state-wide basis during a generating capacity shortage. Power disruptions limited to a local area that are caused by factors other than a generating capacity shortage are outside of the scope of this plan.

Based on the interdependency of generation capacity and generator fuel supply, and that a significant portion of electric generation within Florida uses remotely supplied natural gas, the plan specifically distinguishes generating capacity shortages by primary causes. The two types of generating capacity shortages are

inadequate generating capability (1) due to abnormally high loads or unavailable generating facilities or (2) due to inadequate fuel supply. The two types have distinct initiating events and may require unique responses to ensure optimal state-wide communication and coordination to minimize impacts of shortages on the people of Florida.

The Generating Capacity Shortage Plan addresses: 1) procedures to be followed by individual utilities during a generating capacity shortage on their systems and 2) procedures to be followed by all utilities to ensure coordinated state-wide action and communication.

A. Individual Utility Plans

Each utility participating in this plan shall have an energy emergency plan that will enable it to cope with a generating capacity shortage on its system and to mitigate to the fullest extent practicable the impact of the emergency on its customers, neighbouring utilities and the reliability of the state-wide bulk power system. Each utility plan shall also include a requisite section on specifically coping with a generating capacity shortage directly attributable to a short-term fuel supply or fuel availability constraint. Emergency actions not specifically addressed in the FRCC Plan shall be addressed in the individual utility plans. A copy of each individual plan shall be maintained on file at the Florida Public Service Commission (FPSC) and the Florida Reliability Coordinating Council (FRCC) offices.

B. FRCC Regional Plan

The Plan describes the coordinated procedures to be followed by all FRCC utilities during a generating capacity shortfall. The declaration of any phase of this Plan is based on data and activities occurring in the FRCC Region. However, any declaration will be made on a state-wide basis since media and communication may cross regional boundaries. The Plan consists of four separate phases and procedures for each phase. The four phases are:

- **GENERATING CAPACITY ADVISORY**

A Generating Capacity Advisory anticipates conditions which may affect operations and is primarily for information purposes. An 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; (2) one or more utilities in an area are issuing or planning to issue public appeals for conservation, (3) notification by an individual utility that their generation fuel supplies may be impacted and **may** decrease below a level adequate to provide for continuous, uninterrupted service to its firm customers, or (4) the fuel supplies and deliveries, on a state-wide basis **may** be impacted by weather, natural gas production disruptions, natural

gas pipeline delivery disruptions, or any other fuel infrastructure impacts within the FRCC. An Advisory issued for conditions (3) or (4) will be issued as:

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

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

- **GENERATING CAPACITY ALERT**

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

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

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

- **GENERATING CAPACITY EMERGENCY**

A Generating Capacity Emergency will be declared when (1) one of the electric utilities in the FRCC Region has inadequate generating capacity, including purchased power, to supply its firm load obligations, or (2) the fuel supplies and deliveries on a state-wide basis **have** decreased to a level that is not adequate to provide for continuous, uninterrupted service to firm customers.

The loss of firm load in a localized area due to a transmission or distribution outage, temporary problem or isolated event may be reported but would not cause the implementation of the plan.

The loss of firm load in a localized area due to automatic underfrequency relay operation would not cause the implementation of the plan unless it is anticipated that the outage will extend over several hours.

The declaration of a Generating Capacity Emergency for condition (2) above will be declared as a:

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

A Generating Capacity Emergency declaration indicates an immediate or imminent threat to the reliability of the overall FRCC bulk power system.

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

- **SYSTEM LOAD RESTORATION**

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

IV. COMMUNICATION

The Generating Capacity Shortage Plan includes procedures for responding to emergencies with time frames ranging from sudden, unexpected events to those caused by weather systems that can be tracked and provide advance notice. Included in each phase are samples of public appeal/conservation messages. It is anticipated that these or similar utility-specific message packets will be provided to local media in each utility's service area. Messages correspond with actions required by utility consumers during each phase.

All communications with the public, the news media, and local and regional governmental agencies shall be the responsibility of the individual participating system and shall be coordinated so as to be as non-conflicting as practical. Additionally, utility public information departments will share information with each other and the FRCC.

On an ongoing basis, individual utilities shall build public awareness of events that could lead to generating capacity problems through information programs (such as bill stuffers, speakers bureaus, in-school education, etc.) In addition, employees shall be educated periodically so they can properly and promptly respond to customer inquiries. The messages will change depending on the upcoming season or source of a possible generating capacity shortage.

Even though the Florida Division of Emergency Management and Public Service Commission are state-wide points of contact specified in the plan, the plan does not pre-empt utilities from contacting local emergency agencies or initiating local public information activities. In fact, top-down and bottom-up notification is encouraged to enhance the system and provide an information loop to assure continued dissemination of current information to all involved parties.

Individual utilities shall also assess information activities necessary to heighten consumer and media awareness of the Generating Capacity Shortage Plan, its phases, and actions that can be taken to attempt to minimize a shortage.

V. RESPONSIBILITIES

The State Capacity Emergency Coordinator (SCEC) is responsible for identifying and declaring the appropriate phases of this plan on a forecast basis, based upon criteria specified in each phase. The mechanisms used by the SCEC to gather and analyze the necessary information include, the FRCC Daily Capacity Assessment Report, weather forecasts and individual utility notifications and status reports. Upon meeting a phase's criteria, the SCEC shall contact the Chair of the FRCC Operating Committee (OC), the FRCC Reliability Coordinator (RC), and the FRCC President. The SCEC shall also notify (utilizing FRCC communication systems) generating utilities operations personnel of the condition of the Region's electric utilities.

The FRCC President shall contact the Florida Division of Emergency Management (FDEM), State Warning Point (SWP), the Florida Public Service Commission (FPSC), the Energy Office of the Florida Department of Environmental Protection (FDEP) and the natural gas pipeline operators, operating within the FRCC Region. In case the FRCC President is unavailable, the SCEC shall make the notifications assigned to the FRCC President.

The FDEM is responsible for notifying county and private emergency organizations that are part of its system. FDEM also decides when and if to use the Emergency Broadcast System (EBS) to disseminate messages to citizens. The suggested EBS messages are included as Appendices A-C.

The Florida Public Service Commission acts as an informational liaison to all interested parties. The Energy Office of the Florida Department of Environmental Protection will act as an information liaison in areas particularly related to environmental permitting

that may impact availability of generators or fuel supply. The individual utilities and FRCC staff shall aggregate Regional data and provide status reports and technical updates to the FPSC staff. Utilities along with the FRCC Reliability Coordinator (RC) shall also update the North American Electric Reliability Corporation (NERC) and the Federal Energy Regulatory Commission (FERC) as required. Utilities, along with the FRCC RC shall also specifically update the US Department of Energy (DOE) as appropriate and in accordance with current U.S. DOE, *Electric Emergency Incident and Disturbance Report*, criteria and reporting protocol. All entity reporting shall comply with appropriate NERC Reliability Standards along with applicable FRCC Regional Reliability Standards.

VI. FRCC REGIONAL ASSESSMENT AND COMMUNICATIONS PROTOCOLS

Appendix D of this plan includes summary descriptions of procedures, protocols and processes used by FRCC reliability personnel to ensure accurate, timely and appropriate coordination of information and operational data collection. These procedures, protocols and processes include forward looking capacity assessment reports, conference calls, reliability status reports, fuel inventory status reports and various established communication channels. Information is aggregated and used to ensure accurate reliability assessments of the FRCC Region and effective implementation of this plan.

INDIVIDUAL UTILITY PLANS

Each utility participating in this plan shall have an energy emergency plan that will enable it to cope with a generating capacity shortage on its system and to mitigate to the fullest extent practicable the impact of the emergency on its customers and neighboring utilities. Each utility plan shall include procedures for notification of its own emergency and public information personnel. A copy of each individual plan shall be maintained on file at the Commission and FRCC offices.

Each individual utility's emergency plan or procedures should include (as appropriate for generating and non-generating utilities) the following items (not necessarily in the sequence shown):

- Purpose and scope
- Supporting plans and procedures
- Department and personnel responsibilities
- Categories and criteria for activation of emergency plan
- Emergency communication centers (phone centers)
- Communication networks
- How and when messages are initiated
- Messages (available at utilities, faxed as necessary)
- Seasonal public education messages
- Florida Division of Emergency Management notification
- Florida Public Service Commission notification
- County emergency management agencies notification
- Notification of cogenerators and non-utility generators
- Winterization as applicable
- Scheduling of generation facilities
- Fuel supply management
- Procedures to reduce company use of power
- Load reduction guidelines and identification and prioritization of critical loads
- Training
- Plan revision

Each individual utility's emergency plan or procedures should also include (as appropriate for generating and non-generating utilities) a complementary section or equivalent procedures that specifically enable it to handle a generation fuel shortage affecting its facilities and to mitigate to the fullest extent practicable the impact of short-term, generating fuel, availability constraints on the reliability of the FRCC Bulk Electric System. A copy of each individual plan should be maintained on file at the FRCC offices.

Each individual utility's short-term generation fuel shortage procedures should include the following items (not necessarily in the sequence shown):

- A procedure for forecasting the extent of a generation fuel shortage
- A fuel inventory plan which recognizes unusual delays or problems with the delivery or production of fuel
- A procedure for notification to the FRCC State Capacity Emergency Coordinator (SCEC) and FRCC President
- A plan to operate all its generation resources to optimize, with appropriate deference to economic dispatch, the conservation of the fuel source in short supply, consistent with good operating practices
- A procedure for individual appeals to large industrial and commercial customers to reduce non-essential uses and to maximize use of any customer-owned generation utilizing energy sources other than the fuel in short supply (if applicable)
- A plan for expanding the use of load management resources or voltage reduction (if applicable)
- A plan for purchasing power from other sources. Emphasis should be placed on need to make use of pre-planned interchange contracts between utilities, in an effort to minimize use of fuels in short supply and maximize the efficiency of fuel that is available on a Regional basis

GENERATING CAPACITY ADVISORY

A. Definition

A Generating Capacity Advisory will be issued whenever any of the following conditions exist:

1. When temperature projections exceed the prescribed criteria in two cities in Area 1 or three cities in Area 2 as described below in Paragraph B. Once an Advisory is issued, it will not be rescinded, even if the temperature forecast changes.
2. When one or more utilities have issued, or are planning to issue, public appeals for conservation.
- 3*. When the SCEC receives notification by an individual utility that their generation fuel supplies have been impacted and **may** decrease below a level adequate to provide for continuous, uninterrupted service to its firm customers (generally if fuel requirements cannot meet forecast load requirements for the next (7) days).
- 4*. When the fuel supplies and deliveries, on a state-wide basis **may** be impacted by weather, natural gas production disruptions, natural gas pipeline delivery disruptions, or any other fuel infrastructure impacts within the FRCC.

* For conditions (3) or (4) above, an Advisory will be issued specifically as:

Generating Capacity Advisory / Short-Term Generation Fuel Availability Concern

B. Temperature Projections

In order to accurately reflect real limitations of the transmission system, for calculation purposes, the FRCC Region is divided into two areas, Area 1 and Area 2. For calculating load, resources and reserves, each utility is assigned to the appropriate area. The triggers for the various phases of the plan are developed by area. Once triggered, however, the declaration of the plan phases is on a "FRCC Regional" basis and will not be rescinded even if the temperature forecast for that day changes.

On a daily basis, temperature projections for up to three days in advance will be collected and compared to the prescribed criteria temperature of each city. Below is a list of prescribed criteria temperatures for the cities in Areas 1 and 2. These temperature criteria are subject to periodic revision by FRCC.

	<u>LOCATION</u>	<u>WINTER</u>	<u>SUMMER</u>
AREA 1	Jacksonville	Below 21 F	Above 98 F
	Gainesville	Below 24 F	Above 95 F
	Tallahassee	Below 20 F	Above 98 F
AREA 2	Miami	Below 40 F	Above 92 F
	Orlando	Below 30 F	Above 95 F
	St. Petersburg	Below 32 F	Above 95 F
	Tampa	Below 31 F	Above 93 F

C. State Capacity Emergency Coordinator Responsibility

After assembling and assessing weather data (conditions (1) and (4) above), being notified that public conservation appeals are being issued by one or more FRCC utilities or being notified that condition (3) above is applicable to one or more FRCC utilities, the SCEC shall notify the FRCC President, the Chair of the FRCC Operating Committee (OC) and the FRCC Reliability Coordinator (RC). The SCEC shall also notify (utilizing FRCC communications systems) generating utilities' operation personnel of the Advisory condition. In case the FRCC President is unavailable, the SCEC shall make the notifications assigned to the FRCC President. The SCEC may also initiate multi-day, look-ahead, FRCC Daily Capacity Assessment reporting for utilities in order to more accurately assess base-line conditions, verify the Region is in the appropriate phase of the plan, focus coordination efforts, enhance situational awareness and increase communication among the utilities (see appendix D).

D. FRCC Reliability Coordinator Responsibility

1. Review conditions for potential reliability problems
2. Convene reliability assessment conference calls as appropriate (see appendix D)
3. Notify the adjacent Reliability Coordinator as appropriate
4. Notify NERC in accordance with applicable NERC Reliability Standards
5. For conditions (3) or (4) above, the RC may initiate inventory and forecast fuel availability status reporting (see appendix D)

E. Utility Responsibility

1. Notify SCEC for condition (3) if applicable
2. Implement utility public awareness programs if appropriate
3. Notify utility emergency personnel if appropriate

4. Notify local emergency agencies if appropriate
5. Implement short-term generation fuel shortage procedures if appropriate (see condition (3) above)
6. Provide status reports as required by the SCEC or RC (see appendix D)

F. FRCC President Responsibility

1. After notification from the SCEC, advise the Florida Division of Emergency Management, State Warning Point (SWP), and FRCC member utilities communications personnel of the Advisory condition to include the following information:
 - a. FRCC generating capacity
 - b. FRCC expected peak load
 - c. Expected duration of event
 - d. Explanation of utilities' planned actions, and recommendations of agency actions in support of the utilities
2. If requested by State Warning Point representative, act as single point contact between the SWP and the FRCC utilities.
3. Advise the Florida Public Service Commission of the Advisory status providing the same information as provided to SWP.
4. Advise the Energy Office of the Florida Department of Environmental Protection upon issuance of an Advisory for conditions (3) or (4) above.
5. Advise FRCC Regional natural gas pipeline operators on issuance of an Advisory.

G. State Agency Actions

1. Florida Division of Emergency Management
 - a. Maintain contact with FRCC
 - b. Maintain contact with affected counties
 - c. Prepare for activation of emergency public information
 - d. Notify Florida Energy Office

2. Florida Public Service Commission

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

3. Florida Energy Office

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

H. Public Information

An Advisory does not necessarily indicate an imminent threat of an Alert or an Emergency. Therefore, information offered is preparatory in nature and serves only to forewarn consumers well in advance that conditions exist for the potential of a generating capacity shortage at some point in the future. Advisory information is primarily seasonal in nature and is intended as a reminder of weather effects on utilities and consumers.

1. Notification

In notifying customers and local support agencies, information conveyed generally will not seek specific action responses.

a. Local Emergency Agencies

General information about the ramifications of a generating capacity shortfall due to severe hot, cold, or tropical weather shall be disseminated to local support agencies by individual utilities prior to an Alert. The SWP may also use its network to provide information.

b. News Media

Information to broadly address the issue shall be provided to local media directly by individual utilities.

2. Messages

Messages are general in substance and offered as media backgrounders rather than as hard news. Example: "Higher than usual demand for electricity is anticipated in the next few days. Florida's electric utilities are reminding the public that conservation and the wise use of electricity will lessen the possibility of widespread electric power shortages."

GENERATING CAPACITY ALERT

A. Definition

A Generating Capacity Alert will be issued when any one of the following conditions exists:

1. The FRCC operating margin is such that the loss of the largest generating unit will necessitate interruption of firm load in the FRCC Region.
- 2*. The fuel supplies of an individual utility **have** decreased below a level adequate to provide for continuous, uninterrupted service to its firm customers (generally if fuel requirements cannot meet forecast load requirements for the next (3) days).
- 3*. The fuel supplies and deliveries on a state-wide basis **have** decreased and **may** be below a level adequate to provide for continuous, uninterrupted service to firm customers.

- For conditions (2) or (3) above, an Alert will be issued specifically as:

Generating Capacity Alert / Short-Term Generation Fuel Shortage

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

B. FRCC Regional Generation Fuel Supply Assessment

If an Alert is issued under conditions (2) and (3) above, utilities will immediately begin providing actual and forecast fuel availability data and will provide that data to the FRCC in order to establish an overall fuel supply assessment of the FRCC Region (see appendix D) and begin mitigating actions as appropriate.

C. State Capacity Emergency Coordinator Responsibility

Upon the determination that a Generating Capacity Alert condition exists (conditions (1) and (3)), or upon notification that condition (2) above is applicable to one or more FRCC utilities, the SCEC shall contact the FRCC

President, the Chair of the FRCC Operating Committee (OC) and the FRCC Reliability Coordinator (RC). The SCEC shall also notify (utilizing FRCC communication systems) generating utilities' operation personnel of the Alert condition. In case the FRCC President is unavailable, the SCEC shall make the notifications assigned to the FRCC President. The SCEC shall also initiate multi-day, look-ahead, FRCC Daily Capacity Assessment reporting for utilities in order to more accurately assess base-line conditions, verify the Region is in the appropriate phase of the plan, focus coordination efforts, enhance situational awareness and increase communication among the utilities (see appendix D).

D. FRCC Reliability Coordinator Responsibility

1. Review conditions for potential reliability problems
2. Convene reliability assessment conference calls as appropriate (see appendix D)
3. Notify the adjacent Reliability Coordinator as appropriate
4. Notify NERC in accordance with applicable NERC Reliability Standards
5. For conditions (2) or (3) above, the RC shall initiate fuel inventory and forecast fuel availability status reporting (see appendix D)

E. Utility Responsibility

1. Notify SCEC for condition (2) above, if applicable
2. Implement utility public awareness programs if appropriate
3. Implement individual utility emergency plans if appropriate
4. Notify local emergency agencies if appropriate
5. Implement short-term generation fuel shortage procedures if appropriate (see condition (2) and (3) above)
6. Provide status reports as required by the SCEC or RC (see appendix D)

F. FRCC President Responsibility

1. After notification from the SCEC, advise the Florida Division of Emergency Management, State Warning Point (SWP) and FRCC member utilities communications personnel of a Generating Capacity Alert and provide the following information:
 - a. FRCC generating capacity
 - b. FRCC expected peak load
 - c. Status of major generating unit outages
 - d. Expected duration of event

- e. Explanation of utilities' planned actions, and recommendations of agency actions in support of the utilities
2. If requested by State Warning Point representative, act as single point contact between the SWP and the FRCC utilities.
3. Advise Florida Public Service Commission of the Alert status providing the same information as provided to SWP.
4. Advise Department of Energy of the Alert status.
5. Advise the Energy Office of the Florida Department of Environmental Protection upon issuance of an Alert for conditions (2) or (3) above.
6. Advise FRCC Regional natural gas pipeline operators on issuance of an Alert.

G. State Agency Actions

1. Florida Division of Emergency Management

- a. Maintain contact with affected utilities and/or FRCC
- b. Maintain contact with affected counties
- c. Notify appropriate state agencies, including the Florida Energy Office

2. Florida Public Service Commission

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

3. Florida Energy Office

Maintain contact with Florida Division of Emergency Management and other parties as appropriate.

H. Public Information

An Alert is the first formal phase of generating capacity emergency communications. Messages are specific and call for particular responses to prepare for or prevent an impending emergency.

1. Notification

In notifying customers and local support agencies, messages shall seek specific action responses.

a. Local Emergency Agencies

At this time, safety and/or conservation or system status information shall be disseminated to local emergency agencies by individual utilities. Agencies may decide to activate government access cable television broadcasts and Emergency Broadcast System regional radio broadcasts. Additional information may be provided to local agencies by the SWP.

b. News Media

At this time, news media shall be advised to activate Alert phase communications.

2. Messages

Messages are specific and offered as hard news either in the form of a news release and/or public service announcement. Example: "Due to severe cold weather and an unusually high demand for electricity throughout the state, customers are asked to reduce their consumption of electricity to minimize the need for rolling blackouts. Customers should lower/raise (depending on the season) thermostat settings and shut off all unnecessary appliances. To prepare for possible rolling blackouts, customers should have emergency supplies on hand such as a battery-operated radio, extra batteries, flashlights, candles or lanterns, and bottled water."

GENERATING CAPACITY EMERGENCY

A. Definition

A Generating Capacity Emergency will be declared when (1) any one or more of the electric utilities in the FRCC Region has inadequate generating capability, including purchased power, to supply its firm load operations, or (2) the generation fuel supplies and deliveries on a state-wide basis **have** decreased to a level that is not adequate to provide for continuous, uninterrupted service to firm customers. The sudden loss of firm load due to a local transmission or distribution outage would not cause implementation of this Plan.

The declaration of a Generating Capacity Emergency for condition (2) above will be declared as a:

Generating Capacity Emergency / Short-Term Generation Fuel Shortage

An emergency declaration on the basis of condition (2) indicates an immediate or imminent threat to the reliability of the overall FRCC bulk power system.

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

B. Emergency Response

I Utility Firm Load Reduction

When implementing firm load reduction, facilities essential to the health, safety, or welfare of the community should be considered in individual utility plans and, insofar as the situation makes it practical, their special needs addressed.

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

- (a) Hospitals and similar medical facilities
- (b) Police and fire stations
- (c) Operation, guidance control, and navigation services for public transportation and shipping, including rail, mass transit, licensed commercial air transportation, and other forms of transportation
- (d) Communication services, including telephone and telegraph systems, television, and radio stations
- (e) Water supply and sanitation services, including waterworks, pumping and sewage disposal activities which cannot be reduced without seriously affecting public health
- (f) Federal activities essential for national defense and state and local activities essential for providing emergency services

Although these types of customers may be given special consideration from the curtailment provisions of this plan, they should be encouraged to install emergency generation equipment if continuity of service is essential. In the case of these types of customers when supplied from multiple sources, (such as a hospital with two feeders) efforts will be made to maintain one source in service at all times. Other customers who, in their opinion, have critical equipment should install emergency or portable generating equipment.

Although not within the definition of essential services, the special situation of life sustaining medical equipment may be considered on a case-by-case basis in the individual utility plans. Life sustaining medical equipment is defined as equipment:

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

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

II. FRCC Regional Generation Fuel Supply Response

If an Emergency is declared under condition (2) above, utilities will immediately begin (or continue, if transitioning from Alert phase) providing fuel inventory and forecast fuel availability data to the FRCC in order to

establish an overall fuel supply assessment of the FRCC Region (see appendix D) and begin Regional mitigating actions as practicable.

Mitigating actions may include specific reliability assessments to improve the effectiveness and efficient use of available FRCC Regional fuel supplies and fuel delivery infrastructure. The assessments may also be used to develop detailed FRCC recommendations of governmental agency actions in support of the utilities as well as coordinating assistance requests to the adjacent Reliability Coordinator.

Although this plan summarizes actions and steps to take in the various short-term generation fuel shortage situations, this plan does not diminish the emphasis that should be placed on the need to make use of pre-planned interchange contracts between utilities, in an effort to minimize use of fuels in short supply.

C. State Capacity Emergency Coordinator Responsibility

After notification by the utility(ies) (condition (1)) or assessment of the Region indicates condition (2), the SCEC shall contact the FRCC President, the Chair of the FRCC Operating Committee, and the FRCC Reliability Coordinator (RC). The SCEC shall also notify (utilizing FRCC communication systems) generating utilities' operation personnel of the Emergency condition. In case the FRCC President is unavailable, the SCEC shall make the notifications assigned to the FRCC President. The SCEC will also initiate (or continue, if transitioning from Advisory or Alert phases) multi-day, look-ahead, FRCC Daily Capacity Assessment reporting for utilities in order to better assess changing conditions, accurately track the status of the Region, verify appropriate parameters and proper phase designation of the plan. The look-ahead reporting also continues to focus coordination efforts, enhance situational awareness and increase communication among the utilities (see appendix D).

D. FRCC Reliability Coordinator Responsibility

1. Review conditions for potential reliability problems
2. Convene reliability assessment conference calls as appropriate (see appendix D)
3. Notify the adjacent Reliability Coordinator as appropriate
4. Notify NERC in accordance with applicable NERC Reliability Standards
5. For condition (2) above, the RC shall initiate fuel inventory and forecast fuel availability status reporting (see appendix D)

E. Utility Responsibility

1. Implement utility emergency plans if appropriate
2. Notify the State Capacity Emergency Coordinator (for sudden and unexpected events)
3. Implement short-term generation fuel shortage procedures as applicable (see condition (2) above)
 - a. All efforts should be made, with appropriate deference to economic dispatch, to preserve fuel types with limited availability or limited inventory, from both an individual utility perspective and a collective FRCC Regional perspective
4. Provide status reports as required by the SCEC or RC (see appendix D)
5. Notify the State Capacity Emergency Coordinator

F. FRCC President Responsibility

1. After notification from the SCEC, advise the Florida Division of Emergency Management, State Warning Point (SWP), and FRCC member utilities communications personnel of a Generating Capacity Emergency and provide the following information:
 - a. FRCC generating capacity
 - b. FRCC expected peak load
 - c. Geographic areas and number of customers that are expected to be most severely impacted, if available
 - d. Status of major generating unit outages
 - e. Expected duration of event
 - f. Explanation of utilities' planned actions, and recommendations of agency actions in support of the utilities
2. If requested by State Warning Point representative, act as single point contact between the SWP and the FRCC utilities.
3. Advise Florida Public Service Commission of the Emergency status providing the same information as provided to SWP.
4. Advise the Energy Office of the Florida Department of Environmental Protection when an Emergency is declared.
5. Advise FRCC Regional natural gas pipeline operators on declaration of an Emergency.
6. The FRCC President shall notify the designated individual in the following agencies or offices as appropriate:

Environmental Protection Agency (EPA)
Executive Office of the Governor
Federal Energy Regulatory Commission (FERC)
North American Electric Reliability Council (NERC)
Southeastern Electric Reliability Council (SERC)

G. State Agency Actions

1. Florida Division of Emergency Management

- a. Maintain contact with affected utilities and/or FRCC
- b. Maintain Contact with affected counties
- c. Prepare for activation of emergency public information
- d. Prepare for sheltering of evacuees
- e. Notify appropriate state agencies, including the Florida Energy Office

2. Florida Public Service Commission

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

3. Governor's Energy Office

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

H. Public Information

A Generating Capacity Emergency exists when any one electric utility cannot supply its firm load obligations. Messages are specific and call for appropriate safety, conservation and damage control responses to minimize the effects of the crisis.

1. Notification

In notifying customers and local support agencies, messages seek specific action responses.

a. State Warning Point

The Division of Emergency Management, State Warning Point will decide when and if to initiate the Emergency Broadcast System message (Appendix A or B depending on reason for the emergency).

b. Local Emergency Agencies

At this time, safety and/or conservation or system status information shall be disseminated to local agencies. Agencies may decide to activate government access cable television broadcasts and Emergency Broadcast System regional radio broadcasts. The SWP may provide additional information to local agencies.

c. News Media

At this time, news media shall be advised to activate Emergency phase communications and revise broadcasts accordingly.

2. Messages

Messages are specific and offered as hard news either in the form of a news release and/or a public service announcement. Example: "Electricity has been temporarily interrupted to some customers because of a shortage of electricity. Rolling blackouts have been implemented to prevent blackout of the utility's entire service territory. We do not know how long these circumstances will last, but utility employees are working to restore electric service as quickly as possible. Customers with power should continue to reduce consumption of electricity by lowering/raising (depending on season) thermostat settings and shutting off all unnecessary appliances. If your electricity is off, help us restore your power sooner by leaving on just a few indoor lights so you'll know when your power has been restored."

SYSTEM LOAD RESTORATION

A. Definition

System Load Restoration is complete when firm load reduction has been terminated and power supply is adequate, such that the operating margin can cover the loss of the largest generating unit.

B. Utility Responsibility

1. Notify the State Capacity Emergency Coordinator that firm load has been restored.
2. Provide status reports as required by the SCEC or RC (see appendix D).

C. State Capacity Emergency Coordinator Responsibility

After notification by the utilities, the SCEC shall contact the FRCC President, the Chair of the FRCC Operating Committee (OC) and the FRCC Reliability Coordinator (RC), of the termination of the Emergency condition. The SCEC shall also notify (utilizing FRCC communication systems) the generating utilities' operation personnel. In case the FRCC President is not reachable, the SCEC shall make the notifications assigned to the FRCC President.

D. FRCC Reliability Coordinator Responsibility

1. Review conditions for potential reliability problems
2. Convene reliability assessment conference calls as appropriate (see appendix D)
3. Notify the adjacent Reliability Coordinator as appropriate
4. Notify NERC in accordance with applicable NERC Reliability Standards

E. FRCC President Responsibility

1. Advise SWP of the termination of the Emergency condition
2. Advise FPSC of the termination of the Emergency condition

F. State Agency Actions

1. Florida Division of Emergency Management

- a. Maintain contact with affected utilities and/or FRCC
- b. Maintain contact with affected counties
- c. Evaluate need for continued sheltering as appropriate
- d. Inform the Florida Energy Office

2. Florida Public Service Commission

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

3. Energy Office of the Florida Department of Environmental Protection

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

G. Public Information

The Restoration is the recovery phase of the Emergency. It marks either an end to rolling blackouts or the resumption of service to customers previously impacted. Messages are specific and are designed to provide system status reports, timing and locations of scheduled repair activities, appropriate safety information and customer self-help instruction.

1. Notification

In notifying customers and local support agencies, messages indicate termination of the Emergency. They also provide safety and system status information and call for specific action responses.

a. State Warning Point

Upon meeting the criteria for System Load Restoration, the FRCC President shall contact the Division of Emergency Management, State Warning Point and DEM will decide when and if to initiate the Emergency Broadcast System Load Restoration Message (Appendix C).

b. Local Emergency Agencies

At this time, safety and system status information shall be disseminated to local agencies by individual utilities. Agencies may

decide to activate government access cable television broadcasts and Emergency Broadcast System regional radio broadcasts. The SWP may also provide additional information to local agencies.

c. News Media

At this time, news media shall be advised to activate Restoration phase communications and revise broadcasts accordingly.

2. Messages

Messages are specific and offered as hard news either in the form of a news release and/or public service announcement. Example: "The emergency condition has ended and rolling blackouts have been discontinued. Extra service crews will continue to work around the clock to restore power resulting from utility equipment damage. If your power is out, please call the Customer Service office to report any problems and schedule assistance. Your patience and cooperation during the emergency has been greatly appreciated."

MAINTAINING EMERGENCY PREPAREDNESS

The Chair of the FRCC Operating Committee has the overall responsibility to maintain emergency preparedness. Each year the Chair of the FRCC Operating Committee will review the current preparedness program in order to determine effectiveness of that program in light of current events and past experiences. This review will include a training exercise which will be held annually.

The Chair of the FRCC Operating Committee (OC) is responsible for coordinating the training exercise. The Florida Division of Emergency Management (DEM), the Florida Public Service Commission (FPSC) staff, and representatives from the gas pipeline(s) in the state are to participate in the exercises. The exercises shall consist of a one-day training session for personnel with a major role in the coordination and/or implementation of the activities described within this plan. Such sessions shall include a review of the responsibilities of each individual party along with table-top exercises consisting of one or more possible emergency scenarios.

A group chaired by the FRCC Operating Committee (OC) Chair and made up of the SCEC, and selected FRCC OC members shall critique the exercises called by the plan versus experiences gained through the year. This group will make an assessment of the adequacy of the FRCC Generating Capacity Shortage Plan and will make recommendations, if any, for improvement or revisions.

(STATE EBS MESSAGE)

**"GENERATING CAPACITY EMERGENCY"
(WEATHER-RELATED)**

FLORIDA'S ELECTRIC UTILITIES [use: ARE CURRENTLY or ANTICIPATE] ROTATING ELECTRIC POWER TO CUSTOMERS IN THEIR SERVICE TERRITORIES DUE TO WEATHER-RELATED, HIGH DEMAND WHICH EXCEEDS AVAILABLE POWER SUPPLIES.

TO MINIMIZE THE SCOPE AND DURATION OF THE ROLLING BLACKOUTS, THE STATE'S ELECTRIC UTILITIES HAVE ISSUED THE FOLLOWING EMERGENCY PUBLIC APPEALS.

- IF YOUR ELECTRICITY IS ON, DISCONTINUE ALL NON-ESSENTIAL USES; CONSERVATION WILL HELP!
- IF YOUR POWER GOES OUT, TURN OFF ALL MAJOR ELECTRIC APPLIANCES. THIS WILL HELP PREVENT THE SYSTEM SERVING YOUR HOME FROM BEING OVERLOADED. WHEN POWER IS RESTORED, TURN APPLIANCES ON GRADUALLY, AND ONLY AS NEEDED.
- UTILITY PHONE LINES ARE OVERLOADED. PLEASE LEAVE THE LINES OPEN FOR EMERGENCY CALLS. IF YOU ARE THE ONLY HOME OR BUSINESS IN YOUR NEIGHBORHOOD EXPERIENCING AN EXTENDED POWER OUTAGE, CONTACT YOUR LOCAL ELECTRIC UTILITY.

STAY TUNED FOR FURTHER ANNOUNCEMENTS.

(STATE EBS MESSAGE)

**"GENERATING CAPACITY EMERGENCY"
(SUDDEN POWER LOSS)**

FLORIDA'S ELECTRIC UTILITIES HAVE EXPERIENCED A SIGNIFICANT, WIDESPREAD DISRUPTION TO THE POWER SUPPLY SYSTEM AFFECTING CUSTOMERS THROUGHOUT THE STATE.

RESTORATION OF THE POWER SUPPLY SYSTEM IS UNDER WAY. EFFORTS TO RETURN INDIVIDUAL AND NEIGHBORHOOD ELECTRIC SERVICE, HOWEVER, MAY TAKE SEVERAL HOURS OR MORE.

THE STATE'S ELECTRIC UTILITIES HAVE ISSUED THE FOLLOWING EMERGENCY INFORMATION AND PUBLIC APPEALS:

- IF YOUR ELECTRICITY IS ON, DISCONTINUE ALL NON-ESSENTIAL USES, ESPECIALLY REDUCE USE OF AIR-CONDITIONING/HEATING. CONSERVATION WILL HELP THE RESTORATION EFFORT.
- IF YOUR POWER IS OUT OR GOES OUT — TURN OFF ALL MAJOR ELECTRIC APPLIANCES. THIS WILL HELP PREVENT THE SYSTEM SERVING YOUR HOME FROM BEING OVERLOADED. WHEN POWER IS RESTORED, TURN APPLIANCES ON GRADUALLY, AND ONLY AS NEEDED.
- UTILITY PHONE LINES ARE OVERLOADED. PLEASE LEAVE THE LINES OPEN FOR EMERGENCY CALLS. IF YOU ARE THE ONLY HOME OR BUSINESS IN YOUR NEIGHBORHOOD EXPERIENCING AN EXTENDED POWER OUTAGE, CONTACT YOUR LOCAL ELECTRIC UTILITY.

STAY TUNED FOR FURTHER ANNOUNCEMENTS.

(STATE EBS MESSAGE)

"SYSTEM LOAD RESTORATION"

FLORIDA'S ELECTRIC UTILITIES ANNOUNCED THAT THE WIDESPREAD ELECTRIC POWER EMERGENCY HAS ENDED AND ELECTRIC SERVICE HAS BEEN RESTORED TO MOST AREAS OF THE STATE. SMALLER, LOCALIZED POWER REPAIR AND RESTORATION EFFORTS ARE BEING ADDRESSED BY LOCAL UTILITY CREWS.

"RESTORATION/OPTIONAL"

(DO NOT USE IF EMERGENCY WAS A SUDDEN POWER LOSS)

PUBLIC ACTION ON EARLY APPEALS FOR CONSERVATION IS BEING CREDITED WITH SUBSTANTIALLY HELPING SHORTEN THE SCOPE AND DURATION OF THE POWER OUTAGES.

APPENDIX D

FRCC REGIONAL ASSESSMENT AND COMMUNICATIONS PROTOCOLS

The State Capacity Emergency Coordinator (SCEC) along with the FRCC Reliability Coordinator (RC), perform FRCC Regional reliability functions and assessments under the oversight and, when deemed necessary, under the direction of the FRCC Operating Reliability Sub-committee (ORS), a subordinate committee to the FRCC Operating Committee (OC). ORS along with "reliability only" qualified personnel of the OC make-up the primary channels of communications for the FRCC to quickly assess and respond to reliability impact events or disturbances occurring within the FRCC. Participants are primarily operations personnel from the various utilities and are in positions to understand, and can quickly communicate the status of their operations from a reliability perspective. The individuals that make-up these official communication channels are utility personnel that have direct knowledge over their utility's status and operations but have been separated from their utility's merchant functions. Along with communications, the FRCC has developed information and data gathering tools to ensure Regional assessments are as accurate and Regionally encompassing as possible. Various information and data is typically aggregated and used to ensure accurate reliability assessments of the FRCC.

The descriptions below summarize some of the FRCC Regional protocols, processes and tools used to effectively implement this plan.

A. Enhanced Capacity Assessments Protocol

The normal FRCC Capacity Assessment process requires capacity to be reported on a daily basis, for the current day in the summer and for the next-day in the winter. In order to enhance the SCEC and RC ability to assess FRCC Regional capacity in response to weather, conditions, system events or fuel supply issues, the FRCC SCEC at their discretion may request Enhanced Capacity Assessment reporting by requesting multi-day assessments of capacity that reflect anticipated generation outages along with available fuel supply.

B. FRCC Regional Reliability Assessment Conference Calls

Based on the diversity of issues which may impact utility operations within the FRCC, the utilities have established flexible communications protocols, which provide rapid and efficient status reporting mechanisms. These mechanisms include conference calls and redundant group telecommunications tools along with independent electronic messaging applications. The RC at its

discretion may quickly convene conference calls to assess state-wide conditions and quickly coordinate appropriate responses from an FRCC Regional perspective. Typically, calls may include pipeline operators or other specific utility personnel knowledgeable in the particular issue impacting the Region although where discussions move to regional assessments and information exchange becomes privileged sensitive reliability data, calls are limited "reliability only" qualified participants. Finally, the discussions and assessments on these calls are used to determine the assistance and coordination required from a utility perspective and a governmental agency perspective. This is critical, especially during emergency situations where the proper level of utility authority is required to ensure Regional responses are adequate and in the best interest of the Region.

C. Fuel Data Status Reporting

In order to enhance the SCEC and RC ability to assess the reliability of the FRCC Region, in response to weather, conditions, system events or fuel supply issues, the FRCC RC, at its discretion may request Fuel Data Status reporting be initiated. This process requires the utilities to report their actual and projected fuel availability along with alternate fuel capabilities, to serve their system loads. This is typically provided in type of fuel and expressed in terms relative to forecast loads or generic terms of unit output, depending on the event initiating the reporting process. Data is aggregated at the FRCC and is provided from a Regional perspective, to the RC, SCEC and governmental agencies as requested. Fuel Data Status reporting is only performed when specifically requested.

D. Gas Pipeline Communications

Protocols are also established with the gas pipeline operators to provide notification of gas pipeline(s) disruptions to the SCEC, the FRCC Reliability Coordinator and to the FRCC President, on a timely basis.