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LONG-TERM ENERGY EMERGENCY PLAN FOR FUEL SUPPLY SHORTAGE

TAMPA ELECTRIC COMPANY

EFFECTIVE DATE: 01/01/2015

Version 2015A – January 1, 2015

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ATTACHMENTS

• Attachment I - Long-term Energy Emergency Plan Summary

I. PURPOSE

The purpose of this Long-Term Energy Emergency Plan for Fuel Supply Shortage (hereafter referred to as the Fuel Supply Emergency Plan) is to document the plan for responding to a Tampa Electric Company (TEC) fuel shortage emergency. TEC strives to maintain adequate fuel supplies to enable the company to serve customers reliably. The company accomplishes fuel adequacy through a diverse fuel supply portfolio, multiple suppliers, redundant transportation paths, and flexible storage capacity for the various fuel supply commodities such as natural gas, oil, coal and petroleum coke. Natural gas, although some supply area storage exists, is for the most part an in-time fuel, meaning storage is limited and generation resources consume the fuel when needed via pipeline delivery. Therefore, TEC monitors natural gas commodity and pipelines' availabilities constantly.

TEC has oil storage and, since the company uses oil primarily as a back-up fuel and during emergencies, retains inventories that complement the fuel's practical use. For the solid fuels (i.e., coal and petroleum coke), TEC strives to maintain 45 days of inventory on-the-ground at Big Bend Station. Nonetheless, the company recognizes fuel emergencies can occur. This plan applies to fuel emergencies as defined in Section II and works in cooperation with the *Capacity and Energy Emergency Plan*, which covers abrupt, short-term capacity/energy emergencies.

II. DEFINITION

A fuel supply emergency exists when (a) evidence indicates that within 30 days or less TEC will be unable to receive fuel supplies sufficient to satisfy forecasted fuel supply demands of TEC's generating units and (b) such situation places the entire system at-risk of electric disruption.

III. APPLICABILITY

This plan applies to a fuel supply emergency that: (a) is expected to continue for an unknown duration, (b) cannot be remedied by alternative sources of fuel, capacity and/or energy, and (c) will potentially result in widespread electricity shortages if no action is taken.

The plan addresses both a TEC fuel supply emergency, fuel supply shortages for other Florida utilities, and a fuel supply emergency declared by the

Governor of the state of Florida ("Governor"), as noted in Sections IV and VII herein.

IV. NOTIFICATION, RESPONSIBILITY & DECLARATION

A. Notification Groups

The identification of each group applies also to any group member designees.

- a. *Group 1* is the Vice President, Marketing, Customer Service, Business Development & Fuels Operations; Managing Director of Fuels; the Director of Resource Planning; and the Director of Transmission.
- b. *Group 2* is the Vice President, Marketing, Customer Service, Business Development & Fuels Operations; the Vice President of Energy Supply; and the Senior Vice President of Electric and Gas Delivery.
- B. Fuel Supply Shortage (Potential Fuel Supply Emergency)

Whenever a forecast predicts a fuel supply shortage exists, Fuels Management will notify Group 1 that a potential fuel emergency exists. Also, the Vice President, Marketing, Customer Service, Business Development & Fuels Operations will convene Group 2 to assess the fuel supply emergency. Group 2, if appropriate, will brief the President of Tampa Electric ("President") on the potential fuel supply emergency. The President shall be responsible for declaring a fuel supply emergency, which sets in motion the actions documented in this plan.

C. Fuel Supply Emergency Declared

Whenever the President declares a fuel supply emergency, Group 2 shall orchestrate within their areas the applicable portions of this plan. Additionally, the Senior Vice President of Electric and Gas Delivery, shall, at a minimum, notify the applicable Florida Reliability Coordinating Council ("FRCC") contact of the existence of such emergency. Similarly, whenever the Governor declares a statewide fuel supply emergency, the Vice President, Marketing, Customer Service, Business Development & Fuels Operations shall, at a minimum, notify the President and other members of Group 2. Group 2, as directed by the President, shall orchestrate within their areas the applicable portions of this plan.

The Director of Transmission will be the company coordinator responsible for tactical implementation of the action plans detailed in Section VI of the Fuel Supply Emergency Plan.

V. GENERAL

A. Inventory Planning and Fuel Supply Forecasting

By no later than the end of October of the prior year, Fuels Management with the support of Resource Planning will forecast the upcoming calendar year's fuel inventory for each generating plant in TEC's system. Such forecasts will be updated at least monthly throughout the calendar year.

Whenever such forecasting predicts a fuel supply shortage that has the potential to result in a fuel supply emergency, Fuels Management will notify Group 1, who will convene and assess the situation. The Director of Transmission shall then implement the appropriate portions of Sections V(B) and V(C) below and continue to monitor the situation. If the fuel supply shortage situation is deteriorating and does not appear to be remediable, the Director of Transmission shall caucus with Group 1 then convey the deteriorating fuel condition to Group 2, which moves this plan forward towards potentially implementing Section VI below.

B. Emergency Coordination of Fuel Supplies

During a potential or actual fuel supply emergency, TEC will monitor and forecast fuel availabilities and inventory levels at least weekly with regularly scheduled meetings between the applicable fuels, operations, regulatory, and business areas. TEC will also identify all potential fuel supply sources and delivery options and, if needed, purchase and accelerate delivery of fuel supplies even if of a lesser quality or higher cost.

C. System Operation and Interchange

The following actions may be taken to mitigate the effects of a fuel supply concern prior to implementing any of the demand-side reductions in Section VI:

- TEC may halt or limit the company generation resources from producing energy for non-firm sales.
- TEC may purchase energy from other systems which are able and willing to supply interchange energy for reliability to conserve fuel.
- TEC may operate its units out of economic dispatch or, as environmental permits allow, on an alternative fuel in order to conserve the type of fuel that is in short supply.
- TEC may implement alternative fuel transportation measures if the fuel supply emergency is associated with restrictions in traditional fuel transport methods.
- TEC may implement a system-wide alert, as appropriate.

VI. ACTION PLAN

A. Overview

This action plan is a systematic approach to curtailing electricity usage during a fuel supply emergency. The action plan has four progressive phases. Each phase becomes more severe and addresses energy service reductions to an increasing number of customers. *Phase 1* is entirely voluntary, and would be implemented when there are projected to be 30 days or less of fuel supply availability. *Phase 2* is implemented when the projected fuel supply reaches 20 days. *Phase 3* is implemented at 10 days; and *Phase 4* is implemented at 7 days of available fuel supply remaining. Prior to implementing any phases of the action plan, TEC will exhaust all practical steps and methods of extending and conserving fuel. While this plan provides a step-by-step response to an emergency condition, circumstances at the time may require variations from the plan. See Attachment I for a complete summary of steps for each phase of the plan.

B. Phase 1 (30 days)

1. Initiate communication with customers and make appeals to all customers for voluntary reduction in the use of electricity because of an impending fuel supply shortage. Appeals will be made through news conferences, news releases, paid advertising, and

other available means. Listed below are energy conservation recommendations to be stressed in the appeals:

- A. Lower heating thermostats to 65 degrees or less during heating hours and raise cooling thermostats to at least 80 degrees during cooling hours in all conditioned spaces where this action will result in less energy consumption and does not damage equipment or structure. This excludes customers with physician-advised medical exemptions.
- B. Reduce all indoor lighting levels as close to minimum safety and task levels as practical (particularly commercial and industrial customers).
- C. Eliminate all unnecessary outdoor lighting.
- D. Eliminate display lighting, decorative lighting, and any lighting purely for aesthetics.
- E. Reduce parking lot lighting to the extent practical and where safety is not compromised.
- F. TEC, upon customer request, will give suggestions to individual customers regarding conservation measures applicable to specific installations. However, each customer is responsible for ensuring the implementation of any suggestion is not detrimental to the customer's facilities.
- G. To the extent practical and safe, discontinue use of supplemental energy demanding equipment such as second and third refrigerators, unnecessary freezers, electric pumps, and so on.
- 2. Initiate curtailment of TEC energy use and provide communication to employees.
- 3. Purchase and expedite the transportation of proper fuels.
- 4. End non-firm sales to wholesale customers, purchase available wholesale power, implementing demand side management as needed, and optimize the use of available fuel.

5. TEC representatives will meet with all firm wholesale customers and apprise them of the fuel situation. At this meeting, TEC will strongly suggest that the individual firm wholesale customers make a public appeal immediately to their respective energy service customers to conserve energy.

C. Phase 2 (20 days)

- 1. TEC will make a public announcement that a fuel supply emergency exists and that TEC must implement the second phase of several energy conservation measures and continue to promote load conservation.
- 2. Initiate communication with governmental organizations, including a request to the Governor to suspend SIP of CAA.
- 3. Commercial, Industrial, and Governmental customers will be requested to take the following steps:
 - a. Eliminate the use of lighting for indoor and outdoor advertising devices and displays and building flood lighting, except for lighting a single business identification.
 - b. Reduce weekly energy consumption by 20 percent at all retail businesses, institutional facilities, public and private schools, office buildings, and industrial plants, except for vital health and safety institutions. A 20 percent energy reduction on a 40 hour operating week is equivalent to one day's worth of energy. Vital health and safety institutions, although excluded from the request specifically, will be expected to implement all operationally possible reductions.
 - c. Eliminate non-essential outdoor lighting.
- 4. Request TEC's environmental department to petition governing authorities to temporarily remove environmental constraints from generating units that inhibit the use of available fuel in a manner that mitigates the fuel supply emergency.
- 5. Continue curtailment of TEC energy use.

- 6. Continue or implement demand side management, continue to purchase available wholesale power, and request maximum output from co-generators and wholesale power purchases.
- 7. TEC representatives will meet with all firm wholesale customers at this meeting, TEC will request a 20% voluntary reduction.

D. Phase 3 (10 days)

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

- 1. Continue media communications promoting load conservation. Particularly, residential customers will be requested to curtail their use of high energy demand devices and appliances such as clothes dryers, dishwashers, pool pumps, and the like.
- 2. Request that all industrial customers decrease their energy requirements by up to an additional 20 percent, for a total reduction of up to 40 percent as of this phase. A 40 percent energy reduction on a 40 hour operating week is equivalent to two days' worth of energy. Implement a ban on window and display lighting and a ban on A/C during non-use hours.
- 3. Minimize firm sales, purchase all available non-emergency reserve power, and continue demand side management.

E. Phase 4 (7 days)

Notify the applicable FRCC personnel that the fuel supply for electric generation has reached a crisis level. TEC will then apply the *Capacity and Energy Emergency Plan* for the remainder of Phase 4. The implementation of Phase 4 will be accompanied by a revised TEC news release.

F. Relaxation of Action Plan

Whenever the fuel supply emergency ceases or improves to the point where a lower phase of action is sufficient to continue electric service at the current level, the President, public, and the FRCC will be notified by the Senior Vice President, Electric and Gas Delivery. The relaxation will befit the current fuel supply situation and may involve implementing in reverse sequence the phases described in Section VI.

G. Essential Services

In Phase 4, the Firm Load Curtailment Plan may be implemented. If so essential services shall be given priority on electric service for as long as the situation allows, provided that alternative sources of electric generation/supply are not available to such essential services. Essential services are electric services that are essential to the health, safety, or welfare of the community.

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

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

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

VII. GOVERNOR DECLARED EMERGENCY

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

VIII. ASSISTANCE

If other utilities in the state would benefit from the company's assistance, TEC would take whatever steps are prudent and appropriate to provide such assistance. The determination of prudency would include the evaluation of TEC's fuel projections and the status of TEC's system resources. This assistance would include, but not be limited to:

- 1. Making surplus fuel available for the other utility's use.
- 2. Maximizing the safe transfer of electricity across applicable system interfaces.
- 3. Maximizing voltage support to the utility's system as practical.

Version History

Date	Version Number	Summary of Change	Reason for Change	Changed By
1/18/2010	2010A	Yearly review	Update document with organizational changes	Andrew Kennedy
1/21/2011	2011A	Yearly review	Update document with organizational changes	Andrew Kennedy
10/10/2011	2012A	Yearly review	Update document	Andrew Kennedy
12/7/2012	2013A	Yearly review	Updated document	Andrew Kennedy
01/18/2014	2014 A	Yearly Review	Updated document	Andrew Kennedy
01/23/2015	2015A	Yearly Review.	Revised to simplify and improve clarity of triggers and actions. Modeled after similar plans of other Florida electric IOUs.	Brent Caldwell

Attachment I

LONG-TERM ENERGY EMERGENCY PLAN SUMMARY

	ACTION	30 Days Emergency Declared PHASE 1	20 Days PHASE 2	10 Days PHASE 3	7 Days PHASE 4
1.	Expedite Fuel:				
	Oil	Purchase any proper oil.	Determine types of oil available.	Purchase any satisfactory burnable oil.	Search for and purchase <u>any</u> usable fuel.
	Coal	Purchase any proper coal. Expedite coal transportation.	Purchase any satisfactory burnable coal. Plan fuel transfers.		
	Natural Gas	Purchase additional gas and transportation.	Purchase additional gas and transportation. Maximize gas storage.		

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	ACTION	30 Days	20 Days	10 Days	7 Days
		Declared PHASE 1	PHASE 2	PHASE 3	PHASE 4
2.	Communicate With TEC Employees	Use appropriate internal communication platforms (e.g., electronic mail and/or bulletins) to provide updates to employees as needed.	Use appropriate internal communication platforms (e.g., electronic mail and/or bulletins) to provide updates to employees as needed.	Use appropriate internal communication platforms (e.g., electronic mail and/or bulletins) to provide updates to employees as needed.	Use appropriate internal communication platforms (e.g., electronic mail and/or bulletins) to provide updates to employees as needed.
3.	Communicate With Public and Media	Notify officers and key departments about plans to contact the public and media, if the total fuel supply continues to decrease in Step B.	Issue news release. Provide daily status briefing. Promote load conservation.	Issue news release. Provide daily status briefing. Promote load conservation.	Issue news release. Provide daily status briefing. Promote load conservation.
4.	Communicate With Governmental Organizations	Coordinate with Corporate Communications in notifying appropriate agencies.	Request legal authorities for actions such as waive/modify environmental restrictions, to be taken in this step.		

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	ACTION	30 Days	20 Days	10 Days	7 Days
		Declared PHASE 1	PHASE 2	PHASE 3	PHASE 4
			Update governmental agencies.		
5.	Wholesale Market Power Sales and Purchases	Stop non-firm sales to wholesale customers. Purchase economic wholesale power to the extent possible. TEC will request wholesale customers to make a public appeal immediately to their respective energy service customers to conserve energy.	Arrange non- emergency power purchases, reserve transmission services and tag transaction(s). Request maximum output and availability from co-generators and wholesale power purchases. Request voluntary 20% KWH reduction from firm wholesale customers.	Reduce firm sales to a minimum. Purchase all available non-emergency power, reserve available transmission service, and tag transaction(s). Request 40% voluntary KWH reduction from firm wholesale customers.	Implement Capacity and Energy Emergency Plan
6.	Waive/Modify Environmental Restrictions		Request to Governor to suspend SIP of CAA.		

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	ACTION	30 Days	20 Days	10 Days	7 Days
		Declared PHASE 1	PHASE 2	PHASE 3	PHASE 4
7.	Curtail TEC Energy Use:	Curtail non-essential energy uses.	Curtail non-essential energy uses.	Curtail non-essential energy uses.	
	Offices and Operation Center	Reduce KWH's by 10%. Monitor usage weekly.	Reduce KWH's BY 20%. Set thermostats to 65° for heating and to 80° for cooling. Cut off 25% of exterior lights. Cut off hot water heaters.	Reduce Industrial Customer Usage by an additional 20%. Further reduce A/C. Cut off 50% of exterior lights. Cancel use of TECO Plaza Halls or atrium.	Implement Capacity and Energy Emergency Plan
8.	Promote Load Conservation:	Educate customers. Advertise conservation.	Request 20% KWH reduction. Adjust thermostat settings +/-5°, depending on the season.	Commercial & Industrial: Request 40% KWH reduction. Set thermostats to 65° to 80°. Encourage alternate energy usage. Reduce operating hours if necessary. Residential: Stop using	Implement Capacity and Energy Emergency Plan.

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LONG-TERM ENERGY EMERGENCY PLAN SUMMARY

	ACTION	30 Days	20 Days	10 Days	7 Days
		Declared PHASE 1	PHASE 2	PHASE 3	PHASE 4
				A/C, heating, H.W.H., dryers, dish washers, etc.	
	Lighting		Request elimination of non-essential outdoor, sport and advertising lighting.	Request reduced displays & window lighting.	
				Request commercial establishments limit: a) A/C and heating during nonuse hours and in unoccupied areas b) Non-essential use of hot water.	
9.	Utilize Demand Side Management	Implement as needed.	Implement as needed.	Implement as needed.	Implement Capacity and Energy Emergency Plan.
10.	Curtail Customer Load				Implement Capacity and Energy Emergency Plan.

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	ACTION	30 Days	20 Days	10 Days	7 Days
		Declared PHASE 1	PHASE 2	PHASE 3	PHASE 4
11.	Modify System Operations	Review maintenance schedule to optimize use of available fuel. Minimize spinning reserve while maintaining Operating Reserves.	Modify unit dispatch. Cycle units off-line.		Implement Capacity and Energy Emergency Plan.

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Attachment I - Long-term Energy Emergency Plan Summary

I. PURPOSE

The purpose of this Long-Term Energy Emergency Plan for Fuel Supply Shortage (hereafter referred to as the Fuel Supply Emergency Plan) is to document the plan for responding to a Tampa Electric Company (TEC) fuel shortage emergency. TEC strives to maintain adequate fuel supplies to enable the company to serve customers reliably. The company accomplishes fuel adequacy through a diverse fuel supply portfolio, multiple suppliers, redundant transportation paths, and flexible storage capacity for the various fuel supply commodities such as natural gas, oil, coal and petroleum coke. Natural gas, although some supply area storage exists, is for the most part an in-time fuel, meaning storage is limited and generation resources consume the fuel when needed via pipeline delivery. Therefore, TEC monitors natural gas commodity and pipelines' availabilities constantly.

TEC has oil storage and, since the company uses oil primarily as a back-up fuel and during emergencies, retains inventories that complement the fuel's practical use. For the solid fuels (i.e., coal and petroleum coke), TEC strives to maintain 45 days of inventory on-the-ground at Big Bend Station. Nonetheless, the company recognizes fuel emergencies can occur. This plan applies to fuel emergencies as defined in Section II and works in cooperation with the *Capacity and Energy Emergency Plan*, which covers abrupt, short-term capacity/energy emergencies.

II. DEFINITION

A fuel supply emergency exists when (a) evidence indicates that within 30 days or less TEC will be unable to receive fuel supplies sufficient to satisfy forecasted fuel supply demands of TEC's generating units and (b) such situation places the entire system at-risk of electric disruption.

III. APPLICABILITY

This plan applies to a fuel supply emergency that: (a) is expected to continue for an unknown duration, (b) cannot be remedied by alternative sources of fuel, capacity and/or energy, and (c) will potentially result in widespread electricity shortages if no action is taken.

The plan addresses both a TEC fuel supply emergency, fuel supply shortages for other Florida utilities, and a fuel supply emergency declared by the

Governor of the state of Florida ("Governor"), as noted in Sections IV and VII herein.

IV. NOTIFICATION, RESPONSIBILITY & DECLARATION

A. Notification Groups

The identification of each group applies also to any group member designees.

- a. Group 1 is the Vice President, Marketing, Customer Service, Business Development & Fuels Operations; Managing Director of Fuels; the Director of Resource Planning; and the Director of Transmission.
- b. Group 2 is the Vice President, Marketing, Customer Service, Business Development & Fuels Operations; the Vice President of Energy Supply; and the Senior Vice President of Electric and Gas Delivery.

B. Fuel Supply Shortage (Potential Fuel Supply Emergency)

Whenever a forecast predicts a fuel supply shortage exists, Fuels Management will notify Group 1 that a potential fuel emergency exists. Also, the Vice President, Marketing, Customer Service, Business Development & Fuels Operations will convene Group 2 to assess the fuel supply emergency. Group 2, if appropriate, will brief the President of Tampa Electric ("President") on the potential fuel supply emergency. The President shall be responsible for declaring a fuel supply emergency, which sets in motion the actions documented in this plan.

C. Fuel Supply Emergency Declared

Whenever the President declares a fuel supply emergency, Group 2 shall orchestrate within their areas the applicable portions of this plan. Additionally, the Senior Vice President of Electric and Gas Delivery, shall, at a minimum, notify the applicable Florida Reliability Coordinating Council ("FRCC") contact of the existence of such emergency. Similarly, whenever the Governor declares a statewide fuel supply emergency, the Vice President, Marketing, Customer Service, Business Development & Fuels Operations shall, at a minimum, notify the President and other members of

Group 2. Group 2, as directed by the President, shall orchestrate within their areas the applicable portions of this plan.

The Director of Transmission will be the company coordinator responsible for tactical implementation of the action plans detailed in Section VI of the Fuel Supply Emergency Plan.

V. GENERAL

A. Inventory Planning and Fuel Supply Forecasting

By no later than the end of October of the prior year, Fuels Management with the support of Resource Planning will forecast the upcoming calendar year's fuel inventory for each generating plant in TEC's system. Such forecasts will be updated at least monthly throughout the calendar year.

Whenever such forecasting predicts a fuel supply shortage that has the potential to result in a fuel supply emergency, Fuels Management will notify Group 1, who will convene and assess the situation. The Director of Transmission shall then implement the appropriate portions of Sections V(B) and V(C) below and continue to monitor the situation. If the fuel supply shortage situation is deteriorating and does not appear to be remediable, the Director of Transmission shall caucus with Group 1 then convey the deteriorating fuel condition to Group 2, which moves this plan forward towards potentially implementing Section VI below.

B. Emergency Coordination of Fuel Supplies

During a potential or actual fuel supply emergency, TEC will monitor and forecast fuel availabilities and inventory levels at least weekly with regularly scheduled meetings between the applicable fuels, operations, regulatory, and business areas. TEC will also identify all potential fuel supply sources and delivery options and, if needed, purchase and accelerate delivery of fuel supplies even if of a lesser quality or higher cost.

C. System Operation and Interchange

The following actions may be taken to mitigate the effects of a fuel supply concern prior to implementing any of the demand-side reductions in Section VI:

- TEC may halt or limit the company generation resources from producing energy for non-firm sales.
- TEC may purchase energy from other systems which are able and willing to supply interchange energy for reliability to conserve fuel.
- TEC may operate its units out of economic dispatch or, as environmental permits allow, on an alternative fuel in order to conserve the type of fuel that is in short supply.
- TEC may implement alternative fuel transportation measures if the fuel supply emergency is associated with restrictions in traditional fuel transport methods.
- TEC may implement a system-wide alert, as appropriate.

VI. ACTION PLAN

A. Overview

This action plan is a systematic approach to curtailing electricity usage during a fuel supply emergency. The action plan has four progressive phases. Each phase becomes more severe and addresses energy service reductions to an increasing number of customers. *Phase 1* is entirely voluntary, and would be implemented when there are projected to be 30 days or less of fuel supply availability. *Phase 2* is implemented when the projected fuel supply reaches 20 days. *Phase 3* is implemented at 10 days; and *Phase 4* is implemented at 7 days of available fuel supply remaining. Prior to implementing any phases of the action plan, TEC will exhaust all practical steps and methods of extending and conserving fuel. While this plan provides a step-by-step response to an emergency condition, circumstances at the time may require variations from the plan. See Attachment I for a complete summary of steps for each phase of the plan.

B. Phase 1 (30 days)

1. Initiate communication with customers and make appeals to all customers for voluntary reduction in the use of electricity because of an impending fuel supply shortage. Appeals will be made through news conferences, news releases, paid advertising, and

other available means. Listed below are energy conservation recommendations to be stressed in the appeals:

- A. Lower heating thermostats to 65 degrees or less during heating hours and raise cooling thermostats to at least 80 degrees during cooling hours in all conditioned spaces where this action will result in less energy consumption and does not damage equipment or structure. This excludes customers with physician-advised medical exemptions.
- <u>B.</u> Reduce all indoor lighting levels as close to minimum safety and task levels as practical (particularly commercial and industrial customers).
- C. Eliminate all unnecessary outdoor lighting.
- D. Eliminate display lighting, decorative lighting, and any lighting purely for aesthetics.
- E. Reduce parking lot lighting to the extent practical and where safety is not compromised.
- F. TEC, upon customer request, will give suggestions to individual customers regarding conservation measures applicable to specific installations. However, each customer is responsible for ensuring the implementation of any suggestion is not detrimental to the customer's facilities.
- <u>G.</u> To the extent practical and safe, discontinue use of supplemental energy demanding equipment such as second and third refrigerators, unnecessary freezers, electric pumps, and so on.
- 2. Initiate curtailment of TEC energy use and provide communication to employees.
- 3. Purchase and expedite the transportation of proper fuels.
- 4. End non-firm sales to wholesale customers, purchase available wholesale power, implementing demand side management as needed, and optimize the use of available fuel.

5. TEC representatives will meet with all firm wholesale customers and apprise them of the fuel situation. At this meeting, TEC will strongly suggest that the individual firm wholesale customers make a public appeal immediately to their respective energy service customers to conserve energy.

C. Phase 2 (20 days)

- 1. TEC will make a public announcement that a fuel supply emergency exists and that TEC must implement the second phase of several energy conservation measures and continue to promote load conservation.
- 2. Initiate communication with governmental organizations, including a request to the Governor to suspend SIP of CAA.
- <u>3. Commercial, Industrial, and Governmental customers will be</u> requested to take the following steps:
 - a. Eliminate the use of lighting for indoor and outdoor advertising devices and displays and building flood lighting, except for lighting a single business identification.
 - b. Reduce weekly energy consumption by 20 percent at all retail businesses, institutional facilities, public and private schools, office buildings, and industrial plants, except for vital health and safety institutions. A 20 percent energy reduction on a 40 hour operating week is equivalent to one day's worth of energy. Vital health and safety institutions, although excluded from the request specifically, will be expected to implement all operationally possible reductions.
 - c. Eliminate non-essential outdoor lighting.
- 4. Request TEC's environmental department to petition governing authorities to temporarily remove environmental constraints from generating units that inhibit the use of available fuel in a manner that mitigates the fuel supply emergency.
- 5. Continue curtailment of TEC energy use.

- 6. Continue or implement demand side management, continue to purchase available wholesale power, and request maximum output from co-generators and wholesale power purchases.
- 7. TEC representatives will meet with all firm wholesale customers at this meeting, TEC will request a 20% voluntary reduction.

D. Phase 3 (10 days)

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

- 1. Continue media communications promoting load conservation. Particularly, residential customers will be requested to curtail their use of high energy demand devices and appliances such as clothes dryers, dishwashers, pool pumps, and the like.
- 2. Request that all industrial customers decrease their energy requirements by up to an additional 20 percent, for a total reduction of up to 40 percent as of this phase. A 40 percent energy reduction on a 40 hour operating week is equivalent to two days' worth of energy. Implement a ban on window and display lighting and a ban on A/C during non-use hours.
- 3. Minimize firm sales, purchase all available non-emergency reserve power, and continue demand side management.

E. Phase 4 (7 days)

Notify the applicable FRCC personnel that the fuel supply for electric generation has reached a crisis level. TEC will then apply the *Capacity* and *Energy Emergency Plan* for the remainder of Phase 4. The implementation of Phase 4 will be accompanied by a revised TEC news release.

F. Relaxation of Action Plan

Whenever the fuel supply emergency ceases or improves to the point where a lower phase of action is sufficient to continue electric service at the current level, the President, public, and the FRCC will be notified by the Senior Vice President, Electric and Gas Delivery. The relaxation will

befit the current fuel supply situation and may involve implementing in reverse sequence the phases described in Section VI.

G. Essential Services

In Phase 4, the Firm Load Curtailment Plan may be implemented. If so essential services shall be given priority on electric service for as long as the situation allows, provided that alternative sources of electric generation/supply are not available to such essential services. Essential services are electric services that are essential to the health, safety, or welfare of the community.

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

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

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

VII. GOVERNOR DECLARED EMERGENCY

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

VIII. ASSISTANCE

If other utilities in the state would benefit from the company's assistance, TEC would take whatever steps are prudent and appropriate to provide such assistance. The determination of prudency would include the evaluation of TEC's fuel projections and the status of TEC's system resources. This assistance would include, but not be limited to:

- 1. Making surplus fuel available for the other utility's use.
- 2. Maximizing the safe transfer of electricity across applicable system interfaces.
- 3. Maximizing voltage support to the utility's system as practical.

Version History

Date	Version Number	Summary of	Reason for	Changed By
<u>1/18/2010</u>	<u>2010A</u>	Yearly review	Update document with organizational changes	Andrew Kennedy
<u>1/21/2011</u>	<u>2011A</u>	Yearly review	Update document with organizational changes	Andrew Kennedy
<u>10/10/2011</u>	<u>2012A</u>	Yearly review	Update document	<u>Andrew</u> <u>Kennedy</u>
<u>12/7/2012</u>	<u>2013A</u>	Yearly review	Updated document	Andrew Kennedy
01/18/2014	<u>2014 A</u>	Yearly Review	Updated document	<u>Andrew</u> Kennedy
<u>01/23/2015</u>	<u>2015A</u>	<u>Yearly Review.</u>	Revised to simplify and improve clarity of triggers and actions. Modeled after similar plans of other Florida electric IOUs.	Brent Caldwell

Attachment I LONG-TERM ENERGY EMERGENCY PLAN SUMMARY ACTION 30 Days 7 Days 20 Days 10 Days **Emergency** PHASE 2 PHASE 3 PHASE 4 **Declared PHASE 1** Expedite Fuel: 1. Oil Purchase any proper Determine types of oil Purchase any Search for and oil. available. satisfactory burnable oil. purchase any usable fuel. Purchase any proper Purchase any Coal coal. Expedite coal satisfactory burnable transportation. coal. Plan fuel transfers. **Natural Gas** Purchase additional Purchase additional gas and gas and transportation. transportation. Maximize gas storage.

Attachment I

	<u>ACTION</u>	<u>30 Days</u> Emorgonov	<u>20 Days</u>	<u>10 Days</u>	<u>7 Days</u>
		Declared PHASE 1	PHASE 2	PHASE 3	PHASE 4
<u>2.</u>	Communicate With TEC Employees	Use appropriate internal communication platforms (e.g., electronic mail and/or bulletins) to provide updates to employees as needed.	Use appropriate internal communication platforms (e.g., electronic mail and/or bulletins) to provide updates to employees as needed.	Use appropriate internal communication platforms (e.g., electronic mail and/or bulletins) to provide updates to employees as needed.	Use appropriate internal communication platforms (e.g., electronic mail and/or bulletins) to provide updates to employees as needed.
<u>3.</u>	Communicate With Public and Media	Notify officers and key departments about plans to contact the public and media, if the total fuel supply continues to decrease in Step B.	Issue news release. Provide daily status briefing. Promote load conservation.	Issue news release. Provide daily status briefing. Promote load conservation.	Issue news release. Provide daily status briefing. Promote load conservation.
<u>4.</u>	<u>Communicate</u> <u>With</u> <u>Governmental</u> <u>Organizations</u>	Coordinate with Corporate Communications in notifying appropriate agencies.	Request legal authorities for actions such as waive/modify environmental restrictions, to be taken in this step.		

	Attachment I LONG-TERM ENERGY EMERGENCY PLAN SUMMARY					
	<u>ACTION</u>	<u>30 Days</u> Emergency Declared PHASE 1	<u>20 Days</u> PHASE 2	<u>10 Days</u> <u>PHASE 3</u>	<u>7 Days</u> PHASE 4	
			Update governmental agencies.			
<u>5.</u>	<u>Wholesale</u> <u>Market Power</u> <u>Sales and</u> <u>Purchases</u>	Stop non-firm sales to wholesale customers. Purchase economic wholesale power to the extent possible. <u>TEC will request</u> wholesale customers to make a public appeal immediately to their respective energy service customers to conserve energy.	Arrange non- emergency power purchases, reserve transmission services and tag transaction(s).Request maximum output and availability from co-generators and wholesale power purchases.Request voluntary 20% KWH reduction from firm wholesale customers.	Reduce firm sales to a minimum. Purchase all available non-emergency power, reserve available transmission service, and tag transaction(s). Request 40% voluntary KWH reduction from firm wholesale customers.	Implement Capacity and Energy Emergency Plan	
<u>6.</u>	<u>Waive/Modify</u> Environmental <u>Restrictions</u>		Request to Governor to suspend SIP of CAA.			

Attachment I

	ACTION	<u>30 Days</u>	<u>20 Days</u>	<u>10 Days</u>	<u>7 Days</u>
		Emergency Declared PHASE 1	PHASE 2	PHASE 3	PHASE 4
<u>7.</u>	Curtail TEC Energy Use:	Curtail non-essential energy uses.	Curtail non-essential energy uses.	Curtail non-essential energy uses.	
	Offices and Operation Center	<u>Reduce KWH's by</u> <u>10%.</u> <u>Monitor usage weekly.</u>	Reduce KWH's BY 20%. Set thermostats to 65° for heating and to 80° for cooling. Cut off 25% of exterior lights. Cut off hot water heaters.	Reduce Industrial Customer Usage by an additional 20%. Further reduce A/C. Cut off 50% of exterior lights. Cancel use of TECO Plaza Halls or atrium.	Implement Capacity and Energy Emergency Plan
<u>8.</u>	Promote Load Conservation:	Educate customers. Advertise conservation.	Request 20% KWH reduction. Adjust thermostat settings +/-5°, depending on the season.	Commercial & Industrial: Request 40% KWH reduction. Set thermostats to 65° to 80°. Encourage alternate energy usage. Reduce operating hours if necessary. Residential: Stop using	Implement Capacity and Energy Emergency Plan.

	<u>Attachment I</u> LONG-TERM ENERGY EMERGENCY PLAN SUMMARY								
	<u>ACTION</u>	<u>30 Days</u> <u>Emergency</u> <u>Declared PHASE 1</u>	<u>20 Days</u> PHASE 2	<u>10 Days</u> <u>PHASE 3</u>	<u>7 Days</u> PHASE 4				
	<u>Lighting</u>		Request elimination of non-essential outdoor, sport and advertising lighting.	A/C, heating, H.W.H., dryers, dish washers, etc. Request reduced displays & window lighting. Request commercial establishments limit: a) A/C and heating during nonuse hours and in unoccupied areas b) Non-essential use of hot water.					
<u>9.</u>	<u>Utilize Demand</u> <u>Side</u> Management	Implement as needed.	Implement as needed.	Implement as needed.	Implement Capacity and Energy Emergency Plan.				
<u>10.</u>	<u>Curtail Customer</u> Load				Implement Capacity and Energy Emergency Plan.				

	Attachment I LONG-TERM ENERGY EMERGENCY PLAN SUMMARY							
	<u>ACTION</u>	<u>30 Days</u> <u>Emergency</u> <u>Declared PHASE 1</u>	<u>20 Days</u> <u>PHASE 2</u>	<u>10 Days</u> <u>PHASE 3</u>	<u>7 Days</u> PHASE 4			
<u>11.</u>	Modify System Operations	Review maintenance schedule to optimize use of available fuel. Minimize spinning reserve while maintaining Operating Reserves.	Modify unit dispatch. Cycle units off-line.		Implement Capacity and Energy Emergency Plan.			
TAMPA ELECTRIC COMPANY

LONG-TERM ENERGY EMERGENCY PLAN

FOR

FUEL SUPPLY SHORTAGE

EFFECTIVE DATE: 01/01/2012

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ATTACHMENTS

Attachment I - Long-term Energy Emergency Plan
Attachment II - Environmental Petition Form

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

. INTRODUCTION

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

II. PURPOSE

The purpose of the Fuel Shortage Plan is to establish a systematic and effective means of anticipating, assessing and responding, in an appropriate and coordinated manner, to a long-term energy emergency caused by a fuel supply shortage that affects TEC. However, understanding that the Governor of the State of Florida has the authority to declare a fuel supply shortage for the entire state, TEC would also work with the applicable governmental agencies and/or organizations in an effort to comply with the Governor's declaration.

III. DEFINITIONS

A long-term energy emergency exists when utility fuel supplies are decreasing or are anticipated to decrease below a level adequate to provide for continuous service at required levels as established by customer's normal energy needs. A long-term energy emergency differs from a short-term capacity emergency in that energy requirements cannot be met over an extended period. The period of advance warning and expected duration of a long-term energy emergency is usually measured in terms of weeks or months, as opposed to a day, hours or minutes for a short-term capacity deficiency. The Fuel Shortage Plan addresses contingencies for fuel shortages with no clear resolution when total system inventory levels drop below 10, 15, 25, 35 and 45 days of fuel remaining.

IV. AUTHORITY

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

A. EMERGENCY DECLARATION

	<u>Activity</u>	Position Responsible
1.	Increase fuel inventory and system load monitoring (as appropriate) and make periodic fuel inventory projections available to applicable departments.	Managing Director - Fuels
<u>2.</u>	Alert the Vice President of Fuels Management any time a key fuel supply appears to be in jeopardy due to fuel availability and/or quality constraints, and it is probable that inventory levels will drop below desirable levels. If a long-term energy emergency needs to be declared, this officer will notify the President of TEC to announce the declaration.	Managing Director - Fuels
3.	After a long-term energy emergency is declared, or at the direction of the Vice President of Fuels Management, the following procedure will be followed in determining the fuel supply situation and inventory plan. a. Monitor and prepare short- term forecast of system load.	Energy Control Center Director
	b. Monitor and forecast fuel inventories (including	Managing Director – Fuels

	Activity	Position Responsible		
	reasonable delays or delivery problems).			
	c. Using the above data, run the company's resource commitment program and provide the amount of each type of fuel expected to be used to the Fuels Management Department. The estimated fuel consumption should be established on a daily basis for the first 30 days and then on a weekly basis for up to 75 days.	Resource Planning and Operations Planning Director		
	d. Using the output of b and c above, prepare and distribute a daily or weekly report on the overall fuel supply situation to key departments, areas and personnel (e.g., Grid Operations, the plants, TEC officers).	Managing Director - Fuels		
4.	 Declare a long-term energy emergency when necessary and notify the Chairman of the Florida Reliability Coordinating Council ("FRCC") Reliability Assessment Group about the energy emergency. Also, Declare when to move to each step in the Fuel Shortage Plan Implement all or any part of the Fuel Shortage Plan in cooperation with the FRCC Implement the Fuel Supply Shortage Element of the Florida Electrical Emergency 	President of TEC or by delegation to:Customer Care and Fuels Management Vice PresidentBresidentEnergy Delivery Operations Vice President		

Position Responsible

Activity Contingency Plan upon the declaration of an Emergency Alert by the Florida Public Service Commission or upon the declaration of any long-term energy emergency by the Governor of the State of Florida Declare and notify the appropriate organizations and/or agencies (e.g., FRCC) when the long-term energy emergency is

B. ENERGY EMERGENCY COORDINATOR

over

Activity

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

C. IMPLEMENTATION – ACTIVITIES AND RESPONSIBILITIES

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

	<u>Activity</u>	Position Responsible
4.	Expedite fuel procurement	Managing Director - Fuels
1A	Expedite coal transportation	Managing Director - Fuels
2.	Communicate with TEC employees	Corporate Communication Director

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

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

V. IMPLEMENTATION – SPECIFIC STEPS AND ACTIONS

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

A. STEP A

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

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

- 1. Expedite fuel procurement:
 - a. Oil Procure available oil from sources that meet both environmental and operational constraints.
 - b. Coal Procure available coal from sources that meet both environmental and operational constraints.
 - c. Natural Gas Procure additional gas supply from TEC suppliers and/or other utilities in the state. Request additional transportation from upstream pipelines and other pipeline customers if needed.
 - d. Continue inventory tracking, forecasting, and reporting.
- 1A. Expedite coal transportation:

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

- 2. Communicate with TEC employees:
 - a. Issue internal newsletter/bulletin that explains why the fuel shortage has occurred, provides an overview of the Fuel Shortage Plan and communicates details of Step A.
 - b. Use appropriate internal communication platforms (e.g., electronic mail and/or bulletins) to provide updates to employees as needed.
- 3. Communicate with Public and Media
 - a. Notify officers and key departments (e.g., Customer Service, Fuels Management, and Regulatory) that TEC will contact the public and media, if the total system fuel supply decreases to 35 days and a continued downward trend is anticipated.
- 4. Communicate with governmental organizations:

a. Notify appropriate agencies.

5. Wholesale power sales and purchases:

a. Discontinue non-firm sales.

6. Waive/Modify environmental restrictions:

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

7. Curtail TEC energy use:

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

- 8. Promote load conservation:
 - a. Voluntary:
 - (1) Increase efforts to educate customers in the efficient use of electrical equipment and supplies.
 - (2) Inform customers through advertising programs of specific ways to conserve electric energy.
 - b. Mandatory No action required.
- 9. Utilize Demand Side Management:

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

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

B. STEP B

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

be implemented.

- 1. Expedite fuel procurement:
 - Oil . Procure available oil from sources that meet both environmental and operational constraints. Investigate any and all possible source of oil. Maximize onsite inventory.
 - b. Coal Procure any coal that is available and can be burned in the TEC power plants.
 - c. Natural Gas Procure additional gas supply from TEC suppliers and/or other utilities in the state. Request additional transportation from upstream pipelines and other pipeline customers, if needed, and maximize natural gas storage capacity.
 - d. Develop plans for any physical transfers of fuel that would be practical.
 - e. Continue inventory tracking, forecasting and reporting.
- 1A. Expedite coal transportation:
 - a. Communicate with all transportation providers to review priorities to assure prompt delivery of fuel. Review allocation of coal among available transportation modes.
- 2. Communicate with TEC employees:
 - a. Issue updated emergency information to employees.
- 3. Communicate with public and media:
 - a. Issue news release to the news media, explaining why the fuel shortage has occurred, describing actions TEC is taking to deal with the problem, and providing specific conservation information the news media should convey to customers.
 - b. Provide daily briefings to media on status of emergency.
 - c. Promote load conservation by the public via advertisements that provide customers with specific information on how to conserve electricity.
- 4. Communicate with governmental organizations:

- a. Request legal authority from the proper governmental organization for the actions to be taken in steps 6 -11.
- b. Update appropriate governmental agencies.
- 5. Wholesale power sales and purchases:
 - a. Contact power suppliers (e.g., cogenerators, utilities and power marketers) to request maximum output and availability, arrange non-emergency power purchases to both serve load and operating reserves, reserving applicable electric transmission service(s) and tagging transactions as necessary.
 - b. Contact all firm wholesale customers and request voluntary 15% load reduction.
- 6. Waive/Modify environmental restrictions No new action required.
- 7. Curtail TEC energy use:
 - a. Reduce energy use by at least 20% at all offices and operation centers.
 - b. Discontinue the use of lunchroom kitchens, turn off 25% of exterior lights, and turn off non-essential hot water heaters.
 - c. Reset and lock heating and air conditioning thermostats to 65° and 80°, respectively.
- 8. Promote load conservation:
 - a. Voluntary:
 - (1) Request that residential and commercial customers cut back on energy usage and adjust thermostat settings 5 degrees cooler than normal during a heating season and 5 degrees warmer than a normal setting during a cooling season.
 - (2) Request customers to temporarily discontinue use of indoor advertising devices, outdoor displays and flood lighting except that essential for safety and security.
 - (3) Request all customers to reduce their energy usage by at least 15%. Provide specific examples of how this can be achieved.
 - b. Mandatory:

- (1) Request a governmental ban on all nighttime sporting activities. Close all lighted parks, tennis courts, golf courses, etc. Also, eliminate nonessential outdoor flood lighting and restrict the use of outdoor advertising lighting.
- 9. Utilize Demand Side Management:
 - a. Utilize demand side management as needed to reduce system demand on peak periods and optimize the use of TEC's base load generating units.
- 10. Curtail customer load No action required.
- 11. Modify system operations:
 - a. Modify unit dispatch to load units with obtainable fuels first, and then load units that burn the fuel in short supply.
 - b. Where possible, cycle units fueled by short supply fuel off line and still allow the same demand and energy output.

C. STEP C

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

- 1. Expedite fuel procurement:
 - a. Oil Locate and procure any oil available that would satisfactorily burn in TEC power plants.
 - b. Coal Locate and procure any usable coal.
 - Natural gas Continue procuring additional gas supply from TEC suppliers and/or other utilities in the state, requesting additional transportation from upstream pipelines and other pipeline customers, if needed, and maximizing natural gas storage capacity.
 - d. Implement physical transfers of fuel that is necessary and practical.
 - e. Continue inventory tracking, forecasting and reporting.
- 1A. Expedite coal transportation:

a. Communicate with all transportation providers to review priorities to assure prompt delivery. Review allocation of coal among available transportation modes.

- 2. Communicate with TEC employees:
 - a. Issue updated emergency information to employees.
- 3. Communicate with public and media:

a. Issue updated news statement.

b. Continue advertising conservation.

- 4. Communicate with governmental organizations:
 - a. Request legal authority from the proper governmental agency for the actions to be taken in steps 6-11.

b. Update governmental agencies.

- 5. Wholesale power sales and purchases:
 - a. Purchase all available non-emergency power and operating reserves, reserving applicable electric transmission service(s) and tagging transaction(s) as necessary.
 - b. Contact other utilities regarding potential emergency power purchases.
 - c. Contact all firm wholesale customers and request voluntary 30% load reduction.
 - d. Reduce firm sales to minimums based on individual contracts.
- 6. Waive/Modify environmental restrictions No new action required.
- 7. Curtail TEC energy use:
 - a. Discontinue the use of heating and air conditioning units serving large areas with a small number of people (moving the people as necessary).
 - b. Turn off at least 50% of all exterior lights and discontinue the use of Atrium and TECO Hall facilities.
- 8. Promote load conservation:

a. Voluntary:

- (1) Request residential customers further reduce energy consumption by stopping use of certain electrical services such as air conditioning, heating, hot water heaters, clothes dryers, dishwashers and other convenience devices and equipment.
- (2) Request conditioned offices and buildings (other than critical services such as hospitals) to lower thermostat settings to 65° during the heating season and raise thermostat settings to 80° during cooling season.
- (3) Request commercial establishments, institutional facilities, public and private schools, office buildings and industrial plants further reduce their consumption which may require a reduction in their operating hours.
- (4) Encourage customer use of generation and alternate energy supplies.
- (5) Request all commercial and industrial customers to reduce their energy usage by at least 30%. Provide specific examples of how this can be achieved.

b. Mandatory:

- (1) In commercial establishments, ban all non-essential use of hot water.
- (2) Elimination of window and display lighting.
- (3) Ban all heating and air conditioning during non-use hours and in unoccupied areas of commercial establishments.
- 9. Utilize Demand Side Management:
 - a. Utilize demand side management as needed to reduce system demand on peak periods and optimize the use of TEC's base load generating units.
 - b. Implement Voltage Control (Beckwith option) as needed to reduce system demand at peak periods. Facilities that have been identified as critical to public health and safety by governmental agencies will be exempt from Voltage Control.
- 10. Curtail customer load No action required.

11. Modify system operations:

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

D. STEP D

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

- 1. Expedite fuel procurement:
 - a. Investigate all possible fuel sources in search of any usable fuel.
 - b. Continue inventory tracking, forecasting and reporting.
- 2. Communicate with TEC employees:
 - a. Issue updated information to employees emphasizing that most customers will experience rotating blackouts and why.
- 3. Communicate with public and media:
 - a. Issue updated news statement explaining that most customers will experience rotating blackouts and why.
- 4. Communicate with governmental organizations:
 - a. Request legal authority from the proper governmental agencies for the actions to be taken in steps 6-11.
 - b. Update appropriate governmental agencies. In particular, advise them of customer load curtailment and its impact on their activities.
- 5. Wholesale power sales and purchases:
 - a. Purchase all available emergency and non-emergency power, reserving applicable electric transmission service(s) and tagging transaction(s) as necessary.
 - b. Request voluntary 50% load reduction from all firm wholesale customers.
 - c. Maintain firm sales minimums and notify firm wholesale customers of impending load curtailment.
- 6. Waive/Modify environmental restrictions No new action required.

- 7. Curtail TEC energy use:
 - a. Eliminate all but critical heating and air conditioning such as that for microwaves and computer facilities.
- 8. Promote load conservation:

a. Voluntary:

- (1) Request all commercial and industrial customers to reduce their energy usage by at least 50%. Provide specific examples of how this can be achieved.
- b. Mandatory:
 - (1) Reduce street and area lighting where possible.
 - (2) Discontinue service to interruptible customers as necessary.
- 9. Utilize Demand Side Management:
 - a. Utilize demand side management as needed to reduce system demand at peak periods and optimize the use of TEC's base load generating units.
 - b. Implement Voltage Control (Beckwith option) as needed to reduce system demand at peak periods. Facilities that have been identified as critical to public health and safety by governmental agencies will be exempt from Voltage Control.

10. Curtail customer load - No action required.

11. Modify system operations – No new action required.

E. STEP E

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

- 1. Expedite fuel procurement No new action required.
- 2. Communicate with TEC employees:
 - a. Issue updated emergency information to employee.

3. Communicate with public and media:

a. Issue updated news statement.

- 4. Communicate with governmental organizations:
 - a. Update appropriate governmental agencies.
- 5. Wholesale power sales and purchases:
 - a. Notify firm wholesale customers of their contribution to firm load curtailment. Firm wholesale customers will be notified of TEC's percentage of firm load curtailment and advised that their firm sales will be reduced by the same percentage.
 - b. Continue purchasing all available power, reserving applicable electric transmission service(s) and tagging transaction(s) as necessary.
- 6. Waive/Modify environmental restrictions No new action required.
- 7. Curtail TEC energy use No new action required.
- 8. Promote load conservation No new action required.
- 9. Utilize Demand Side Management Same as Step D.
- 10. Curtail customer load:

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

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

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

Application of load curtailments will be made by company personnel in the exercise of their judgment according to

circumstances existing at the time of the emergency. The selection will be based upon giving minimal disruption of convenience and general social and economic well being of the TEC service area, considering practical implementation procedures and effectiveness as well as community and governmental response. These actions can result in some customer's service being interrupted more than others.

- 11. Modify system operations:
 - a. Implement plans to ensure the orderly shutdown of all units burning the fuel in short supply in the event the fuel is exhausted.
 - b. Implement plans to ensure power availability to all power plants and fuel handling facilities.

VI. DETAILED DEPARTMENT PLANS FOR EACH STEP OF EMERGENCY

A. FACILITY SERVICES

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

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

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

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

Each department head should inform their employees (e.g., via face-to-face meeting or in writing) to conserve electricity within the workplace. This is in addition to informational releases by Corporate Communications.

- b. Refrain from using any piece of equipment requiring electrical power that can be delayed for a long period of time.
- c. The Meter Reading Department will take weekly readings at all TEC facilities and provide information for monitoring to the Facility Service Department.

- d. The Facility Service Department will assist those departments not meeting their reduction goal by making additional recommendations.
- e. The Facility Service Department will provide the Energy Emergency Coordinator the results of the weekly monitoring.
- f. The Building Service Department will take such actions recommended by the Energy Emergency Coordinator.
- 2. Step B Reduce TEC energy usage 20% at all offices and operation centers. Some additional measures to achieve this are:
 - a. Discontinue the use of breakroom kitchens i.e., stoves, microwaves and refrigerators.
 - b. Turn off 25% of exterior lights. Each department head and/or building landlord will be responsible for doing this. The Facility Service Department will assist those departments who need help in achieving this goal.
 - c. The Facility Service Department will turn off all water heaters.
 - d. The Facility Service Department will reset and lock all heating and air conditioning thermostats to 65° and 80°, respectively.
- 3. Step C
 - a. Turn off at least 50% of all exterior lights.
 - b. Cancel the use of the TECO Plaza Hall or Atrium.
 - c. Discontinue the use of heating and air conditioning units servicing large areas with a small number of people. This may involve relocating personnel.
- 4. Step D Eliminate all heating and air conditioning except for critical systems such as microwave and computer facilities.

B. CUSTOMER SERVICE

Upon declaration of a long-term energy emergency, the Customer Care Department, with the cooperation of Energy Management Services and the Account Management department, will be responsible for the steps

listed below. In working to implement these steps, each department will also take into consideration the general social and economic well being of the TEC service area, as well as community and governmental response. These steps will occur with close coordination and collaboration with the Energy Supply Resource Planning and Grid Operations Teams.

- 1. Step A Customer Service account managers will contact all key assigned commercial and industrial customers (including interruptible & cogenerator accounts) and advise them of the fuel shortage and provide them information on potential ways to reduce their energy usage.
- 2. Step B The Customer Service account managers will contact all key assigned commercial/industrial customers (including interruptible and cogenerator accounts) and advise them the fuel supply has diminished to a point which makes it necessary to request a further curtailment of 5% of their load until further notice. Also, the account managers will advise customers of the specific conservation measures that should be taken as stated in Section VI. C.
- 3. Step C The Customer Service account managers will contact all key assigned commercial/industrial customers (including interruptible and cogenerator accounts) and advise them the fuel supply has diminished to a point which makes it necessary to request a further curtailment of 10% for a total of 15% of their load until further notice. Also, the account managers will advise customers of the specific conservation measures that should be taken as stated in Section VI. C.
- 4. Step D The Customer Service account managers will contact all key assigned commercial and industrial customers (including interruptible and cogenerator accounts and advise them the fuel supply has diminished to a point which makes it necessary to request a further curtailment of 15% for a total of 30% of their load until further notice. Also, the account managers will advise customers of the specific conservation measures that should be taken as stated in Section VI. C.
- 5. Step E The Customer Service account managers will contact all key assigned commercial and industrial customers (including interruptible load customers) and advise them the fuel supply has diminished to a point which makes it necessary to request a further curtailment of 20% for a total of 50% of their load until further notice. Account managers advise interruptible load customers of impending curtailment of service. Commercial and industrial

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

- 6. Step F The Customer Service account managers will contact all key assigned commercial and industrial customers (including interruptible load customers) and advise them of the continued need to maintain all load curtailment action until further notice.
- 6. Step G As needed, both Customer Service Directors will change phone/call center scripts to inform customers of this issue, as Tampa Electric Company may decide to cease normal business operation.
- Note: In all steps, the Customer Service will:
 - a. Maintain communications with each interruptible & cogenerator customer for the purpose of providing status reports on the fuel shortage emergency and answering any questions.
 - b. Be responsible for communicating with each interruptible & cogenerator customer upon restoring partial load to each customer. The restoration process will follow the same steps as curtailment, however, in reverse.

C. ENERGY MANAGEMENT SERVICES

Upon the declaration of a long-term energy emergency, the Customer Care, Energy Management Services, Account Management and the Business & Industry Team will be responsible for the steps listed below. In working to implement these steps, each department will also take into consideration the general social and economic well being of the TEC service area, as well as community and governmental response.

- 1. Step A Promote load conservation:
 - a. Voluntary measures:
 - (1) Inform customers through advertising programs of specific ways to conserve electric energy.
 - (2) Educate customers in the efficient use of electrical equipment and appliances.
 - b. Mandatory measures No action required.
- 2. Step B Promote load conservation:

. Voluntary measures:

- (1) Work with Corporate Communications and announce to the public by newspaper, television and radio that an electric supply emergency exists and that the Company is requesting them to conserve electricity.
- (2) Direct commercial customers to temporarily discontinue use of indoor advertising devices, outdoor displays and flood lighting, except those items that are essential for safety and security.
- (3) Request residential and commercial customers to do without all non-essential electrical services, cut back on essential usage and adjust thermostat setting 5° down from a normal setting during a heating season and 5° up from a normal setting during a cooling season.
- (4) Notify the public daily through news media as to the status of the Company's electric supply emergency and the extent to which the Fuel Shortage Plan is working.
- b. Mandatory measures:
 - (1) Request for a governmental ban on all nighttime sporting activities, including closure of all lighted parks, tennis courts, golf courses, etc.
 - (2) Request the public to: Eliminate non-essential outdoor flood lighting, and restrict the use of outdoor advertising lighting.
- 3. Step C Promote load conservation:
 - a. Voluntary measures Residential:
 - (1) Announce to the public that TEC's electric energy emergency supply continues to worsen and that it is requesting its customers to control and cease use of certain electric energy consuming devices.
 - (2) Direct residential customers to further reduce energy consumption by eliminating use of non-essential electrical services, such as electric hot water heaters, clothes dryers, dishwashers, air conditioning, heating and other convenience devices and equipment.

- (3) Notify customers daily through news media as to the status of the electric supply emergency and the extent to which the Fuel Shortage Plan is working.
- b. Voluntary measures Commercial:
 - (1) Direct conditioned offices and buildings other than critical services such as hospitals to lower thermostat settings to 65° during the heating season and raise thermostat to 80° during the cooling season.
 - (2) Direct commercial establishments, institutional facilities, public and private schools, office buildings and industrial plants to further reduce their consumption, which may require a reduction in their operating hours.
 - (3) Encourage customer use of generation and alternate energy supplies.
 - (4) Ask all commercial and industrial customers to curtail their load by 30%.
- c. Mandatory measures Residential: No new action required.
- d. Mandatory measures Commercial (Request from the public):
 - (1) Eliminate window and display lighting.
 - (2) Ban heating and air conditioning during non-use hours.
 - (3) Ban heating and air conditioning in unoccupied areas.
 - (4) Ban all non-essential hot water use. Exceptions: Medical facilities, educational facilities and food establishments.
- 4. Step D Promote load conservation:
 - a. Voluntary measures Residential:
 - (1) Continue observance of previous steps.
 - b. Voluntary measures Commercial:
 - (1) Encourage strict temperature control of HVAC systems.

- (2) Ask all commercial and industrial customers to curtail their load by 50%.
- c. Mandatory measures Street and Area Lighting
 - (1) Reduce exterior TEC Street and Area Lighting Systems as practical within prudent guidelines.
- 5. Step E Residential/Commercial/Industrial customer action:
 - a. Voluntary measures Residential:
 - (1) Announce to the public that the electric supply continues to deteriorate and that TEC's rotating feeder disconnect plan, which will interrupt electrical service mainly to residential and small commercial customers for specified periods of time, will be implemented to achieve capacity and energy reduction as dictated by the electric supply emergency. This plan will allow for feeder disconnect as often as required to achieve desired results.
 - b. Mandatory measures:
 - (1) No new action required.

D. ENVIRONMENTAL, HEALTH & SAFETY

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

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

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

a. The nature and extent of the long-term energy emergency;

b. Current and projected unemployment impacts associated

with the long-term energy emergency;

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

E. FUELS MANAGEMENT

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

- 1. During Steps A-E, Fuels Management will focus on the previously stated activities to expedite the procurement of coal, oil and natural gas. These activities require Fuels Management to:
 - a. Formulate emergency fuel procurement strategies, policies, and guidelines based upon analysis of internal and external variables impacting TEC's fuel operations and update them as emergency conditions change.
 - b. Monitor fuel market conditions and assess future trends. Report market information to management.

- c. Assure a constant fuel supply to generation plants in accordance with environmental and performance standards as long as possible under the constraints caused by the fuel emergency.
- d. Investigate alternate sources of supply, in accordance with the procurement arrangements set forth by the emergency strategy, to allow the company to respond to changes in regulation, operating requirements, or market conditions.
- e. Manage existing fuel inventories in a way that assures the most efficient use of fuels under the constraints caused by the fuel emergency.
- f. Provide fuel and transportation availability information for planning and control of operations under the fuel emergency conditions.
- g. Investigate the feasibility of physical transfers of fuel. If during the emergency, a physical transfer of fuel should become practical and necessary due to some physical limitation of the electrical system, the bilateral transfers will be accomplished through mutual agreement between the utilities involved. The principle upon which these transfers will be based is that the original owner or procurer of the fuel shall be made whole in terms of the cost, quantity, and quality of fuel transferred as soon after the emergency as practicable.
- h. Develop information, reports, and testimony relating to TEC's fuel procurement activities during the long-term energy emergency, including documentation of instances where fuel stocks and/or deliveries were shared with other entities.

F. GOVERNMENTAL / REGULATORY AFFAIRS

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

- 1. Step A
 - a. Coordinate with the Vice President of Corporate Communications those messages communicated to TEC and with media and public prior to the release of such communications to provide public officials with sufficient

advance time to prepare proper responses for public inquiry.

- b. Assist Vice President of Energy Supply with governmental contact to waive/modify environmental restrictions.
- c. Notify selected public officials of the long-term energy emergency. Relate message developed in subpart 1a above. Advise of TEC Fuel Shortage Plan and steps to be taken.
- 2. Step B
 - a. Contact appropriate city and county official, including but not limited to school officials, and Tampa Sports Authority to implement Step 7.b., Mandatory Load Conservation, to prohibit nighttime sporting activities and to close lighted parks, tennis courts, golf courses, etc.
 - b. Update public officials.
- 3. Step C
 - a. Contact local state and federal agencies to implement Step 7.b. curtailment of heating and air conditioning, nonessential use of hot water and elimination of window and display lighting.
 - b. Update public officials.
- 4. Step D
 - a. Contact city and county to reduce street and area lighting in Section 7.b.
 - b. Advise public officials of customer load curtailment in Section 9 and its potential impact on their activities.
- 5. Step E
 - a. Advise public officials of customer load curtailment and its potential impact on their activities.
 - b. Communicate all notices to governmental organizations.

G. ENERGY & GAS DELIVERY TRANSMISSION ENGINEERING & OPERATIONS

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

1. Step A

a. No action required

2. Step B

a. Develop emergency line ratings for the lines requested by Grid Operations to allow maximum power transfer capability to TEC.

H. ENERGY SUPPLY OPERATIONS

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

1. Step A

- a. Eliminate or reduce convenience lighting except where required for safe work conditions.
- b. Eliminate unnecessary heating and air conditioning of unoccupied areas.
- c. Review plant operations to determine unnecessary uses of energy, eliminating or reducing uses where practical.
- d. Identify areas where additional reductions can be made if worsening situations dictate.
- 2. Step B
 - a. With critical review of lighting and plant operations, continue elimination and reduction of unnecessary lighting, heating, and air conditioning.
 - b. Reset required heating and air conditioning thermostats to 65° and 80°, respectively.
 - c. Discontinue use of lunchroom kitchens.
 - d. Turn off water heaters.
 - e. Turn off 25% of exterior lights.

f. Discontinue lighting during daylight hours where possible.

3. Step C

- a. Continued review of energy uses making reductions where possible.
- b. Reduce all lighting, interior and exterior, to the minimum required for safety and business need.

c. Eliminate all non-essential heating and air conditioning load.

4. Step D

a. Low load situation should allow removing units from service resulting in a reduction in associated station service. An attempt should be made to accomplish as much reduction as possible.

b. Review plants for orderly shutdown of units.

5. Step E

a. Proceed with orderly shutdown of units as fuel supply is exhausted.

I. CORPORATE COMMUNICATIONS

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

1. Step A

- a. Communicate with TEC employees.
 - (1) Issue an internal newsletter or electronic message and/or bulletin that explain why the fuel shortage has occurred, provides an overview of the Fuel Shortage Plan and communicates details.
 - (2) Provide updated emergency information as needed.
- b. Communicate with public and news media.
 - (1) Issue news release to the media to explain why the fuel shortage has occurred, communicate actions TEC is taking to deal with the problem and provide

specific conservation information to customers. This information will also be provided to Customer Inquiry representatives.

- (2) Provide daily briefings to media on status of emergency.
- (3) Promote load conservation by the public via advertisements that will provide customers with specific information on how to conserve electricity.

2. Step B

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

3. Step C

- a. Communicate with TEC employees.
 - (1) Provide updated emergency information as needed.
- b. Communicate with public and news media.
 - (1) Issue news statement about the continued downward trend in fuel supply, communicate conservation information and steps company is taking to solve the problem. This information will also be provided to Customer Inquiry representatives.
 - (2) Continue advertising that communicates conservation information.

4. Step D

a. Communicate with TEC employees.

- (1) Provide updated emergency information as needed.
- b. Communicate with public and news media.
 - (1) Issue news statement about the continued downward trend in fuel supply, communicate conservation information and steps company is taking to solve the problem. This information will also be provided to Customer Inquiry representatives.
 - (2) Continue advertising that communicates conservation information.

5. Step E

- a. Communicate with TEC employees.
 - (1) Issue emergency information emphasizing that most customers will experience rotating blackouts and why they will occur.
- b. Communicate with public and news media.
 - (1) Issue news statement to explain the continued downward trend in fuel supply. As outlined in this Step, announce that most customers will experience rotating blackouts, why, they will occur, and what the company is doing to solve the problem. This information will also be provided to Customer Inquiry representatives.
 - (2) In addition to conservation information, advertising will also explain why rotating blackouts are occurring. Ads will describe that the outages are being distributed evenly among all customers, except for hospitals, fire and police, etc., after consideration of disruption of convenience and general social and economic well being of the community.

J. WHOLESALE MARKETING

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

1. Step A

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

2. Step B

- a. Contact utilities and power marketers regarding firm and non-firm power purchases. Request co-generators and wholesale power suppliers to maximize their output and availability. Coordinate with Grid Operations and Operations Planning concerning power purchase needs. Make appropriate power purchases from resources available in the wholesale market, reserving the applicable transmission service(s) and tagging the transaction(s), as necessary.
- b. Request all firm wholesale customers reduce their load by 15%.

3. Step C

- a. Purchase all available non-emergency power. Coordinate purchases with Grid Operations and Operations Planning, reserving the applicable transmission service(s) and tagging the transaction(s) as necessary.
- b. Reduce firm sales to minimums based on individual contracts.
- c. Contact other utilities regarding potential emergency power purchases.
- d. Request all firm wholesale customers voluntarily reduce their load by 30%.
- 4. Step D
 - a. Purchase all available emergency and non-emergency power. Coordinate purchases with Grid Operations and Operations Planning, reserving the applicable transmission service(s) and tagging the transaction(s) as necessary.
 - b. Request voluntary 50% load reduction from firm wholesale customers.
 - c. Maintain firm sales minimums and notify wholesale customers of impending load curtailment.
- 5. Step E
 - a. Notify firm wholesale customers of their contribution to firm load curtailment.

 b. Continue purchasing all available power. Coordinate purchases with Grid Operations and Operations Planning. Reserve available transmission service(s) to bring those purchase(s) into the TEC system, and tag the transaction(s).

K. GRID OPERATIONS

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

1. Step A

- a. Utilize Demand Side Management Utilize demand side management as needed to reduce system demand at peak periods and optimize the use of TEC's base load generating units.
- b. Provide the Energy Emergency Coordinator with a shortterm demand and energy forecast during the emergency.
- c. Provide Operations Planning an hourly load profile for the first 30 days and weekly peaks up to 75 days.
- d. Minimize the amount of spinning reserve while maintaining Operating Reserves.
- e. Review maintenance schedule to optimize obtainable fuels.
- f. Notify the State Capacity Emergency Coordinator of public appeals for conservation.
- 2. Step B
 - a. Utilize Demand Side Management Utilize demand side management as needed to reduce system demand at peak periods and optimize the use of TEC's base load generating units.
 - b. Modify unit dispatch to add units with obtainable fuels first, and then load units which burn the fuel in short supply.
 - c. Identify circuits that need emergency line ratings to allow maximum import and power transfer capability. Request Transmission Engineering & Operations to furnish these ratings.

3. Step C

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

a. Continue as Step D.

b. Implement firm load curtailment if needed.

L. OPERATIONS PLANNING

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

- 1. Step A
 - a. Run the resource commitment program and provide the projected fuel burn (by fuel type) to the Fuels Management Department. The estimated fuel consumption should be on a daily basis for the first 30 days and then on a weekly

basis for up to 75 days. Update the estimate as required.

b. Review maintenance schedule to optimize obtainable fuels.

2. Step B

a. Modify unit dispatch to add units with obtainable fuels first, and then load units which burn the fuel in short supply.

3. Step C

a. Continue as Step B.

4. Step D

a. Continue as Step C.

5. Step E

a. Continue as Step D.

Version History

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

Attachment I

LONG-TERM ENERGY EMERGENCY PLAN SUMMARY

	ACTION	4 5 Days≛ Emergency Declared STEP A	35 Days STEP B	25 Days - STEP C	15 Days STEP D	10 Days STEP E
1.	Expedite Fuel: Oil	Purchase any proper oil.	Determine types of oil available.	Purchase any satisfactory burnable oil.	Search for and purchase any usable fuel.	
	Coal	Purchase any proper coal. Expedite coal transportation.	Purchase any satisfactory burnable coal. Plan fuel transfers.			
	Natural Gas	Purchase additional gas and transportation.	Purchase additional gas and transportation. Maximize gas storage.			
2.	Communicate With TEC Employees	Use appropriate internal communication platforms (e.g., electronic mail and/or bulletins) to provide updates to employees as needed.				
3.	Communicate With Public and Media	Notify officers and key departments about plans to contact the public and media, if the total fuel supply continues to decrease in Step B.	Issue news release. Provide daily status briefing. Promote load conservation.			
4 .	Communicate With Governmental Organizations	Coordinate with Corporate Communications in notifying appropriate	Request legal authority for actions such as waive/modify environmental			
Attachment I

LONG-TERM ENERGY EMERGENCY PLAN SUMMARY

	ACTION	4 5 Days* Emergency Declared STEP A	35 Days STEP B	25 Days - STEP C	15 Days STEP D	10 Days STEP E
		agencies.	restrictions, to be taken in this step. Update governmental agencies.			
5.	Wholesale Market Power Sales and Purchases	Stop non-firm sales to wholesale customers.	Arrange non-emergency power purchases, reserve transmission services and tag transaction(s).Request maximum output and availability from co- generators and wholesale power purchases.Request voluntary 15% KWH reduction from firm wholesale customers.	Reduce firm sales to a minimum. Purchase all available non- emergency power, reserve available transmission service, and tag transaction(s). Request 30% voluntary KWH reduction from firm wholesale customers.	Reduce firm sales to a minimum. Purchase all available emergency and non- emergency power, reserve available transmission service, and tag transaction(s). Request voluntary 50% KWH reduction from firm wholesale customers.	Notify firm wholesale customers of the percentage of firm load curtailment and advise that their firm sales will be reduced by the same percentage. Continue purchasing all available power.
6.	Waive/Modify Environmental Restrictions	Request to Governor to suspend SIP of CAA.				
7.	Curtail TEC Energy Use: Offices and Operation Center	Curtail non-essential energy uses. Reduce KWH's by 10%. Monitor usage weekly.	Reduce KWH's BY 20%. Set thermostats to 65° for	Further reduce A/C. Cut off 50% of exterior	Cut off all but critical A/C and heating.	
			heating and to 80° for cooling. Cut off 25% of exterior lights. Cut off hot	lights. Cancel use of TECO Plaza Halls or atrium.		

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Attachment I

LONG-TERM ENERGY EMERGENCY PLAN SUMMARY

	ACTION	4 5 Days* Emergency Declared STEP A	35 Days STEP B	25 Days - STEP C	15 Days STEP D	10 Days STEP E
			water heaters.			
8.	Promote Load Conservation: -Voluntary	Educate customers. Advertise conservation.	Request 15% KWH reduction. Adjust thermostat settings +/-5°, depending on the season. Cut out indoor & outdoor advertising lights. Cut out flood lighting as possible.	Commercial & Industrial: Request 30% KWH reduction. Set thermostats to 65° to 80°. Encourage alternate energy usage. Reduce operating hours if necessary. Residential: Stop using A/C, heating, H.W.H., dryers, dish washers, etc.	Commercial & Industrial: Request 50% KWH reduction.	
	Mandatory		Ban night sports. Close lighted parks, etc. Ban non-essential flood and outdoor advertising lighting.	Ban displays & window lighting. Ban in commercial establishments: a) A/C and heating during nonuse hours and in unoccupied areas b) Non-essential use of hot water.	Reduce street and area lighting where possible. Discontinue service to interruptible customers as necessary.	
9.	Utilize Demand Side Management	Implement as needed.	Implement as needed.	Implement as needed.	Implement as needed.	Implement as needed.
10.	Curtail Customer					Implement TEC

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	Attachment I LONG-TERM ENERGY EMERGENCY PLAN SUMMARY					
	ACTION	4 5 Days* Emergency Declared STEP A	35 Days STEP B	25 Days - STEP C	15 Days STEP D	10 Days STEP E
	Load					Firm-Load Curtailment plan if needed.
11.	Modify System Operations	Review maintenance schedule to optimize user of available fuel. Minimize spinning reserve while maintaining Operating Reserves.	Modify unit dispatch. Cycle units off-line.	Use emergency line ratings.		Implement orderly shutdown of units as required. Ensure power available to plants.

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

ATTACHMENT II ENVIRONMENTAL PETITION FORM

BEFORE THE STATE OF FLORIDA OFFICE OF GOVERNOR

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

TAMPA ELECTRIC COMPANY

Petitioner)

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

IDENTIFICATION OF PARTIES

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

BACKGROUND

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

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

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

FACTS SUPPORTING RELIEF

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

- Petitioner obtains its ______ sulfur content fuel supplies from ______.
 Petitioner has been advised that due to (insert here reasons for supply unavailability)

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

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input would not cause significant impact levels for total suspended particulate matter to be exceeded in the Hillsborough County air quality maintenance.

REQUEST FOR RELIEF

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

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

TAMPA ELECTRIC COMPANY

By: _____

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