Matthew R. Bernier

January 6, 2017

VIA ELECTRONIC FILING

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

Re: Revised Fuel Emergency Plan; undocketed

Dear Ms. Stauffer:

Pursuant to Rule 25-6.0185, F.A.C., Duke Energy Florida, LLC ("DEF") hereby submits for filing its revised Fuel Emergency Plan in both clean copy format and type/strike format.

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

Respectfully,

<u>s/Matthew R. Bernier</u> Matthew R. Bernier Senior Counsel

MRB/mw Enclosures





ENERGY CONTROL CENTER TRANSMISSION SYSTEM OPERATIONS DEPARTMENT DUKE ENERGY FLORIDA

Duke Energy Florida

Fuel Emergency Plan

Rev. 8

Applicability	DEF ECC
Document Owner	James Cardillo
Date Approved	12/14/2016
Effective Date	12/15/2016
Review Cycle	Each Calendar Year
Document Classification	Public
Region	FRCC – Duke Energy Florida, Inc NCR00063

Purpose:

This document outlines the procedure to be used in the event of an extended fuel emergency involving Duke Energy Florida (DEF). Should an extended fuel emergency or the threat of an extended fuel emergency occur, one in which the energy supply in the entire service territory is subject to jeopardy, then this plan applies.

ENERGY CONTROL CENTER TRANSMISSION SYSTEM OPERATIONS DEPARTMENT DUKE ENERGY FLORIDA

Title

Duke Energy Florida Fuel Emergency Plan

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2.0 Purpose and Scope

The Duke Energy Fuels and Systems Optimization (FSO) Department is responsible for the preparation and maintenance of the Fuel Emergency Plan. The DEF Energy Control Center (ECC), in conjunction with the Duke Energy FSO Department, is the primary contact for the plan document. The DEF ECC will take the lead in initiating and coordinating the periodic review and update of this Fuel Emergency Plan.

Beginning in January 1999 and every three years thereafter, Duke Energy Florida (DEF) is required to notify the Florida Public Service Commission (PSC) that we have reviewed our Fuel Emergency Plan (FPSC Rule 25-6.0185). Whenever the Fuel Emergency Plan is updated with material changes, the new plan document must be filed with the PSC. Matthew Bernier in Legal is the contact for filing notices or updates.

The Fuel Emergency Plan also supports compliance with NERC standard EOP-001-2.1b, which requires that our emergency plans address an adequate fuel supply and fuel inventory plans. The Fuel Emergency Plan should be reviewed and updated annually for NERC compliance purposes.

3.0 Introduction

This plan outlines the procedure to be used in the event of an extended fuel emergency involving Duke Energy Florida (DEF). Should an extended fuel emergency or the threat of an extended fuel emergency occur, one in which the energy supply in the entire DEF service territory is in jeopardy, then this plan applies.

A Fuel Supply Committee is established and will consist of one representative from each of the following sections: Power Trading, System Operations (Florida Energy Control Center), System Optimization, Fuel Procurement, Regulatory Affairs and Corporate Communications. Other representatives may be identified by the Fuel Supply Committee. The Director of System Operations, Florida, or designated representative will serve as Chair. The Senior Vice President Fuels and Systems Optimization, or designated representative, will closely monitor fuel supplies, deliveries, and anticipated usage rates. When fuel inventory levels reach or are at risk of reaching levels that could adversely impact the dispatch and operation of DEF's generation fleet, as determined by the SVP of FSO, the Chairman will activate the Fuel Supply Committee. The Committee will abide by all applicable state and federal standards and codes of conduct.

The committee has authority and responsibility to decide when the levels or availability of fuel supplies, or the rate of change in fuel inventory levels is such that declaration of an ALERT is required. The Chairman will inform the Executive Vice President, Regulated Generation, when an ALERT is declared so that he or she may implement the appropriate portions of this plan.

4.0 Definitions

Fuel inventory levels are defined for the following fuel emergency situations. These situations could occur at any individual site or at multiple sites where generation and fuel storage facilities exist, thus causing a site emergency.

ALERT

An ALERT condition exists when the potential for a FUEL EMERGENCY arises and specific Company actions are deemed prudent.

FUEL EMERGENCY

When fuel inventory levels are such that current or projected usage will result in the supply reaching the following levels before deliveries can be made and a downward trend is anticipated to continue:

Light Oil – 50 hours

Coal – 10 days

Natural Gas - Long-term (greater than three months) loss of major pipeline supply source

5.0 Alert

When an ALERT condition is declared, the following actions will be taken under the direction of the Fuel Supply Committee in an attempt to minimize the potential for the situation to progress to a fuel emergency condition. These actions may include, but not be limited to, the following (actions may be performed in any order depending on the nature of the fuel supply shortfall):

- 1. Notify the Executive Vice President & President, Regulated Generation and Transmission, that a fuel supply ALERT is declared and in progress.
- 2. Conduct periodic (at least daily) conference calls with the Fuel Supply Committee to review current status and operational changes. Such calls (if applicable) shall be posted on OASIS pursuant to FERC standards of conduct requirements.
- 3. Defer or reschedule, to the extent practicable, maintenance on oil, natural gas or coal-fired units, taking into consideration heat rate and availability.
- 4. Operate oil, natural gas, and coal-fired generation utilizing the lowest heat rate source to minimize the consumption of distillate oil by oil-fired units and/or coal by coal-fired units, and/or natural gas by natural gas fired units, consistent with conserving the fuel(s) in short supply.
- 5. Engage the power market to effectively maximize conservation of constrained fuel(s) via market purchases.
- 6. Utilize load management procedures and voltage reductions to control demand and energy consumption consistent with conserving the fuel(s) in short supply.
- 7. Shut down low inventory and/or high heat rate units and/or natural gas units, over weekends and overnight, if practicable, to conserve fuel(s) in short supply.
- 8. Place maximum allowable Operating Reserve in the non-synchronized quick-start category to minimize fuel consumption.
- 9. Request the Fuel Supply Committee to implement fuel transfers to eliminate geographical shortages and locate fuel where it can most efficiently be utilized.
- 10. Request the Environmental Service Department to remove environmentally initiated constraints for generating units that inhibit the most efficient use of available fuel.
- 11. ECC to evaluate the use of DSM and industrial curtailment to minimize fuel consumption.
- 12. The Chairman will notify the Chairman of the FRCC Operating Committee and the FRCC Reliability Coordinator and apprise them of our alert status and will request daily conference calls to apprise them of our fuel inventory status.

6.0 Fuel Emergency

6.1 Granting Authority in Fuel Supply Emergency

After the Fuel Supply Committee has determined that a specific fuel emergency exists, they will inform the Executive Vice President, Regulated Generation, who will implement the associated corrective actions for the specific FUEL EMERGENCY condition in effect consistent with system security constraints. The Executive Vice President, Regulated Generation, will have the authority to implement and cancel steps within the specific FUEL EMERGENCY condition as system conditions permit.

6.2 Declaration of Fuel Emergency

When a FUEL EMERGENCY is declared, the Chairman, Fuel Supply Committee, shall ensure all actions normally anticipated to occur during an ALERT have taken place and then will invoke the following actions to minimize fuel consumption. These actions may include, but not be limited to, the following (actions may be performed in any order depending on the nature of the fuel supply shortfall):

- 1. Notify appropriate DEF personnel that a FUEL EMERGENCY is in effect. The Corporate Communications Department will have the responsibility for notification of employees, customers, and the general public. News media representatives will be contacted to assist.
- 2. Conduct periodic (at least daily) conference calls with the Fuel Supply Committee to review current status and operational changes. Such calls shall be posted on OASIS pursuant to FERC standards of conduct requirements.
- 3. Curtail Company use wherever possible.
- 4. ECC to limit transmission line equipment outages to emergency outages if the outages would reduce delivery of energy into the system.
- 5. Engage the power market to effectively maximize conservation of constrained fuel(s) via market purchases.
- 6. The Chairman will contact the Chairman of the FRCC Operating Committee and the FRCC Reliability Coordinator and apprise them of our fuel emergency status.
- 7. ECC to implement the use of DSM and industrial curtailment to minimize fuel consumption.
- 8. Advise the Corporate Communications Department to make radio and television appeals for conservation to the public to minimize electrical energy consumption.
- 9. Contact municipal systems and cooperative systems and request that their customers voluntarily reduce their load.
- 10. Declare force majeure and discontinue firm energy sales to neighboring systems as permitted under the power sales agreement, or as directed by Governor's orders during the emergency. (Except under extreme conditions, assistance could be provided if fuel inventory levels are above the 12hour emergency minimum.)

6.3 Customer Priorities for Load Interruption

In the early stages of a capacity emergency, DEF will curtail recallable interchange sales and those interchange sales declining a buy-through option. The DEF General Load Reduction Plan (GLRP) contains different Alert Levels dependent on the nature of the capacity emergency:

- Grid Alert Levels
 - System Alert declared when the GLRP is expected to be activated based on projected system conditions
 - Capacity Alert (Phase 1) interruptible and curtailable customers are notified that emergency purchases may be required.
 - Capacity Emergency (Phase 2) emergency purchases for interruptible and curtailable customers begin.
- Energy Emergency Alert level 1 (EEA 1), (Phase 3) interruptible and curtailable customer loads are interrupted. All available Generation Resources are in use.
- Energy Emergency Alert level 2 (EEA 2), (Phase 4) emergency purchases are made to support firm load.
- Energy Emergency Alert level 3 (EEA 3), (Phase 5) DEF foresees a need to interrupt service to firm loads and is not able to maintain Operating and Regulating Reserves.

At various points during a developing capacity emergency several other actions are undertaken to mitigate the severity of the emergency, including maximizing available generation, activating DSM, activating voltage reduction, reduction of DEF internal energy consumption and public appeals for conservation.

Firm load curtailment occurs during EEA 3 (Phase 5) of the GLRP, when service to firm loads is interrupted on a rotating basis in order to maintain a balance between available generation and system load. The load interruptions will be rotated in order that no single customer or area is without electricity for an extended period of time.

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

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

Whenever possible during a capacity emergency, DEF will sustain uninterrupted service to critical loads and customers.

6.4 Statewide Fuel Supply Emergency

In the event that a Fuel Supply Emergency is declared by the Governor of Florida due to conditions either within DEF or in another utility, DEF will take the actions listed within this plan consistent with the actions directed by the Governor's order and the FRCC, specifically:

- 1. The Fuel Supply Committee will be responsible for fuel calculations and communicating to the FRCC staff, upon request, DEF's DAYS BURN by fuel type. They will also supply any additional data relating to fuel supply conditions requested by the FRCC staff.
- 2. The Executive Vice President, Regulated Generation, or designee, will assure the operation of all generating units as appropriate to share energy so as to minimize a statewide fuel shortage.
- 3. The Senior Vice President, Fuels and Systems Optimization or designee, will be responsible for arranging any necessary transfer of fuels and the conditions affecting the transfer and payment and/or return of such fuel.

6.5 Authority for Reduction of Fuel Emergency Conditions

If any portion of this plan has been activated as a result of the declaration of a fuel emergency by the Governor of Florida, then this plan will remain active and in effect until the emergency has been terminated by the Governor.

In the event that this plan has been initiated by the Fuel Supply Committee, then the Chairman, Fuel supply Committee, will determine when fuel supply and inventory levels are such that the fuel emergency condition can be terminated. The Fuel Supply Committee chairman will then notify all affected departments of the termination of the fuel emergency condition and institute relaxation of the conservation measures consistent with system reliability requirements. The Fuel Supply Committee chairman will also notify the appropriate state and federal agencies as required.

Approvals	
Recommend: James Cardillo Engineer I	APPROVED By James Cardillo at 1:00 pm, Dec 14, 2016
Approve: Lee Schuster Manager, Operations Engineering	APPROVED By Lee Schuster at 1:21 pm, Dec 14, 2016
Glenn S. Dooley Director, System Operations	APPROVED By Glenn S. Dooley at 2:43 pm, Dec 14, 2016
Approval date:12/14/2016Effective date of this revision:12/15/2016	
NOTE: Upon final approval, provide copies to the DEF Legal Department (for filing with the Post on FRCC TOP/BA posting area Distribute to responsible DEF Department	e FPSC)

ENERGY CONTROL CENTER TRANSMISSION SYSTEM OPERATIONS DEPARTMENT DUKE ENERGY FLORIDA

Duke Energy Florida Fuel Emergency Plan Revision History

Rev #	Date of	Description of Changes to Document
	Revision	
8	12/2016	Updated procedure format and annual update
7	10/2015	Annual Procedure Update
6	10/2014	Annual Procedure Update
5	01/2013	Annual Procedure Update
4	12/2012	Annual Procedure Update
3.3	07/2011	Annual Procedure Update
3.2	12/2009	Annual Procedure Update
3.1	11/2008	Annual Procedure Update
3.0	04/2007	Annual Procedure Update
	01/2006	Annual Procedure Update
	05/2003	Annual Procedure Update
	06/2002	Annual Procedure Update
	12/1998	Annual Procedure Update
	09/1997	Annual Procedure Update
	10/1992	Annual Procedure Update
	01/1992	Implementation

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TRANSMISSION SYSTEM OPERATIONS DEPARTMENT DUKE ENERGY FLORIDA
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Duke Energy Florida Fuel Emergency Plan DATE: 12/15/2016 REV: 8

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Duke Energy Florida Fuel Emergency Plan DATE: 12/15/2016 REV: 8

6.0 Fuel Emergency

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6.3 Customer Priorities for Load Interruption In the early stages of a capacity emergency, DEF will curtail recallable interchange sales and those Moved (insertion) [33] interchange sales declining a buy-through option. The DEF General Load Reduction Plan (GLRP) contains Formatted: Font: Times New Roman, 11 pt different Alert Levels dependent on the nature of the capacity emergency: Grid Alert Levels o System Alert - declared when the GLRP is expected to be activated based on projected system conditions o Capacity Alert (Phase 1) - interruptible and curtailable customers are notified that emergency purchases may be required. Capacity Emergency (Phase 2) - emergency purchases for interruptible and curtailable customers begin. Energy Emergency Alert level 1 (EEA 1), (Phase 3) - interruptible and curtailable customer loads are interrupted. All available Generation Resources are in use. Energy Emergency Alert level 2 (EEA 2), (Phase 4) - emergency purchases are made to support firm load. Energy Emergency Alert level 3 (EEA 3), (Phase 5) – DEF foresees a need to interrupt service to ٠ firm loads and is not able to maintain Operating and Regulating Reserves. At various points during a developing capacity emergency several other actions are undertaken to mitigate the severity of the emergency, including maximizing available generation, activating DSM, activating voltage reduction, reduction of DEF internal energy consumption and public appeals for conservation. Firm load curtailment occurs during EEA 3 (Phase 5) of the GLRP, when service to firm loads is Formatted: Tab stops: 1.81", Left interrupted on a rotating basis in order to maintain a balance between available generation and system load. The load interruptions will be rotated in order that no single customer or area is without electricity for an Moved (insertion) [34] extended period of time. Formatted: Font: Times New Roman, 11 pt The priority for interruption of individual customers and feeders is determined and reviewed on an annual basis as part of the DEF under-frequency relay program update. Each year, each feeder on the DEF system Moved (insertion) [35] is reviewed and classified for purposes of potential firm load interruption. Feeders serving critical Moved (insertion) [36] customers or loads are classified as 'no trip' and are exempt from interruption providing that resources exist to continue serving this critical group of customers. The types of customers and loads designated as no trip Moved (insertion) [37] are as follows: Critical DEF facilities Hospitals and nursing homes Customers on life-sustaining medical equipment Airports and FAA facilities Police and fire stations Telephone and satellite communication facilities Water treatment and pumping facilities Critical government facilities Formatted: Font: 11 pt Newspaper, radio, and TV stations, Formatted: Font: Times New Roman, 11 pt Malls and large public arenas Major commercial and industrial customers

Whenever possible during a capacity emergency, DEF will sustain uninterrupted service to critical loads and customers.

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6.4 Statewide Fuel Supply Emergency

In the event that a Fuel Supply Emergency is declared by the Governor of Florida due to conditions either within DEF or in another utility, DEF will take the actions listed within this plan consistent with the actions directed by the Governor's order and the FRCC, specifically:

- <u>The Fuel Supply Committee will be responsible for fuel calculations and communicating to the FRCC staff, upon request, DEF's DAYS BURN by fuel type.</u> <u>They will also supply any additional data relating to fuel supply conditions requested by the FRCC staff.</u>
- 2. <u>The Executive Vice President, Regulated Generation, or designee, will assure the operation of all</u> generating units as appropriate to share energy so as to minimize a statewide fuel shortage.
- 3. The Senior Vice President, Fuels and Systems Optimization or designee, will be responsible for arranging any necessary transfer of fuels and the conditions affecting the transfer and payment and/or return of such fuel.

6.5 Authority for Reduction of Fuel Emergency Conditions

If any portion of this plan has been activated as a result of the declaration of a fuel emergency by the Governor of Florida, then this plan will remain active and in effect until the emergency has been terminated by the Governor.

In the event that this plan has been initiated by the Fuel Supply Committee, then the Chairman, Fuel supply Committee, will determine when fuel supply and inventory levels are such that the fuel emergency condition can be terminated. The Fuel Supply Committee chairman will then notify all affected departments of the termination of the fuel emergency condition and institute relaxation of the conservation measures consistent with system reliability requirements. The Fuel Supply Committee chairman will also notify the appropriate state and federal agencies as required.

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NERC COMPLIANCE DOCUMENT

ENERGY CONTROL CENTER TRANSMISSION SYSTEM OPERATIONS DEPARTMENT DUKE ENERGY FLORIDA

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Duke Energy Florida Fuel Emergency Plan Revision History			
<u>Rev #</u>	Date of Revision	Description of Changes to Document	
<u>8</u>	<u>12/2016</u>	Updated procedure format and annual update	
<u>7</u>	<u>10/2015</u>	Annual Procedure Update	
<u>6</u>	<u>10/2014</u>	Annual Procedure Update	
<u>5</u>	<u>01/2013</u>	Annual Procedure Update	
<u>4</u>	12/2012	Annual Procedure Update	
<u>3.3</u>	<u>07/2011</u>	Annual Procedure Update	
<u>3.2</u>	<u>12/2009</u>	Annual Procedure Update	
<u>3.1</u>	<u>11/2008</u>	Annual Procedure Update	
<u>3.0</u>	04/2007	Annual Procedure Update	
	<u>01/2006</u>	Annual Procedure Update	
	<u>05/2003</u>	Annual Procedure Update	
	<u>06/2002</u>	Annual Procedure Update	
	<u>12/1998</u>	Annual Procedure Update	
	<u>09/1997</u>	Annual Procedure Update	
	<u>10/1992</u>	Annual Procedure Update	
	<u>01/1992</u>	Implementation	

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