

State of Florida



Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD
TALLAHASSEE, FLORIDA 32399-0850

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

DATE: December 21, 2017
TO: Carlotta S. Stauffer, Commission Clerk, Office of Commission Clerk
FROM: Emily Knoblauch, Engineering Specialist, Division of Engineering *EK* *JS*
RE: Docket No. 20170215- EU - Review of electric utility hurricane preparedness and restoration actions.

Please file the attached "City of Starke - Letter dated 11/14/17, with attached response to staff's first data request," in the above mentioned docket file.

Thank you.

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STATE OF FLORIDA



OFFICE OF THE GENERAL COUNSEL
KEITH C. HETRICK
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Public Service Commission

November 14, 2017

STAFF'S FIRST DATA REQUEST *via email*

To:

Duke Energy Florida, LLC (Matthew.Bernier@duke-energy.com, dianne.triplett@duke-energy.com)
Florida Power & Light Company (ken.hoffman@fpl.com)
Gulf Power Company (jastone@southernco.com, rab@beggslane.com)
Tampa Electric Company (jbeasley@ausley.com)
Municipal Group (AZubaly@publicpower.com)
Lee County (dennie.hamilton@lcec.net)
Cooperative Group (mhershel@feca.com)

Re: Docket No. 20170215-EU - Review of electric utility hurricane preparedness and restoration actions.

To Whom It May Concern:

By this letter, the Commission staff requests that each utility provide responses to the following data requests.

Staging for Utility Personnel and Mutual Aid

1. Please describe the pre-storm coordination process for Hurricanes Hermine, Matthew, Irma, Maria, and Nate. The description should include:
 - a. Dates and topics of internal meetings held after each storm was named.
IRMA – meeting with all supervisors, Police and Fire Department regarding preparations and status of each department.
9/7; 9/8; 9/9
Daily meetings at 10 am and 5 pm at the EOC
MATTHEW – N/A
 - b. Dates and topics of external communication pertaining to mutual aid held after each storm was named.
IRMA - NONE
MATTHEW – N/A
 - c. Date mutual aid was requested and nature of request.
IRMA - 9/8/17 request for Linemen and Trucks
MATTHEW – 10/4/16

2. Please provide a detailed description of the utility's allocation of storm duties for all personnel. This should include a description of each function and the number of utility personnel assigned.
IRMA – restoration of power, setting of poles, hanging transformers, putting wire back up by 17 of utility personnel
MATTHEW – restoration of power, setting of poles, hanging transformers, putting wire back up by 13 of utility personnel
3. When did the costs for Hurricanes Hermine, Matthew, Irma, Maria, and Nate begin to accrue for receiving mutual aid?
IRMA – 9/10/17
MATTHEW – 10/6/16

Damage Assessment Process

4. Please provide a detailed overview of the initial damage assessment process for Hurricanes Hermine, Matthew, Irma, Maria, and Nate, including the number of utility employees or contractors involved, their duties, and how initial damage assessment is disseminated within the utility to assist in restoration activities. Additionally, please provide photographs or other visual media that memorializes storm damage, which was documented during the initial damage assessment process.
** Hurricane Irma caused the worst damage to the City of Starke since 2004 with 45 MPH sustained winds, 70 MPH wind gusts; and 15 inches of rainfall creating flooding and making it difficult to access some areas. The main reason for damage was high winds pushing over trees which then fell across our power lines. This created a system wide power outage impacting 100% of the City's utility customers with 3,800 residents without power during the peak outages. Mutual Aid was requested and received from several states (Alabama, Georgia, Michigan, Oklahoma and Pennsylvania). Once winds subsided to 15 MPH, line crews started at substations with priority at Shands Starke Hospital, 4 Nursing Homes/ Assisted Living facilities; special needs residents at home, and all other outages in order received. Linemen began restoring power, repairing and replacing poles; replacing transformers and putting wire back up.
IRMA – see attached photos
17 Crew members putting wire up; setting poles; replacing transformers; pulling and replacing wire due to downed poles; trees on lines; power lines on ground.
MATTHEW – Trees across power lines, broken poles, down power lines, city-wide power outages.
5. Please provide a description of how damage assessment data is updated and communicated internally.
IRMA & MATTHEW – EOC hotline was used to receive updates and communicate out to each location Supervisor; hand written documents in the field; photos taken by crew members then downloaded to zip drive..

Restoration Workload

6. Please provide a detailed description of how the utility determines when and where to start restoration efforts.
IRMA & MATTHEW – line crews started at substations once wind was down to 15 MPH with priority for Shands Starke Hospital, 4 assisted living facilities, special needs residents at home, in order received
7. For Hurricanes Hermine, Matthew, Irma, Maria, and Nate, please complete the following table on workload priority:

Personnel Responsible for Restoration Workload Assignments		
Hurricane MATTHEW	Years of experience	Number of crews managed
Line Crew Supervisor	17 years of experience	4 crews
Hurricane IRMA		
Line Crew Supervisor	18 years of experience	4 crews

8. Please provide a description of how restoration workload adjusts based on work completed and updates to damage assessments.
IRMA & MATTHEW – every 24 hours reported out to FMEA on % of power restored; started on first feeder that feeds Shands Starke Hospital.
9. If applicable, please describe how mutual aid was determined to be no longer needed following Hurricanes Hermine, Matthew, Irma, Maria, and Nate.
IRMA – when power restored to 100%
MATTHEW – Supervisor reported to FMEA every 24 hours the percentage restored.

Staffing Considerations

10. Regarding Hurricanes Hermine, Matthew, Irma, Maria, and Nate, please respond to the following, please provide the following:
 - a. Days of lodging provided for Utility personnel (Person-Days)
IRMA & MATTHEW - none
 - b. Days of lodging provided for mutual aid partners (Person-Days)
IRMA
4 people for 6 of days lodging (Trees)
5 people for 6 days lodging (Athens)
2 people for 8 days lodging (South Haven)
4 people for 8 days lodging (Claremore)
1 person for 6 days lodging (ECG)
MATTHEW – 7 people, 5 days
 - c. Number of meals provided for Utility personnel
IRMA – 2 per person
MATTHEW - 130

- d. Number of meals provided for mutual aid partners
IRMA – 2 per person
MATTHEW - 70
- e. Number of Utility personnel injuries
IRMA & MATTHEW - None
- f. Number of mutual aid partner injuries
IRMA & MATTHEW - None
- g. Number of Utility personnel fatalities
IRMA & MATTHEW - None
- h. Number of mutual aid partner fatalities
IRMA & MATTHEW - None

Please note any delays in restoration associated with items e-h above.
IRMA & MATTHEW - none

- 11. Please provide a detailed description of when your Utility was considered fully restored from each named storm event.
IRMA – when 100% of power was restored by Thursday 9/14/17
MATTHEW – 100 % of power was restored by 2:00 PM on 10/13/16

Customer Communication

- 12. Regarding Hurricanes Hermine, Matthew, Irma, Maria, and Nate, please respond to the following for each county in the Utility's service territory affected by the storms.
 - a. Total number of customer accounts
IRMA – 3800 in City of Starke
MATTHEW – 3,800
 - b. Peak number of outages
IRMA – 100% outage for 3800 customers
MATTHEW – 3,800
- 13. Please provide how call center customer service representatives were utilized before, during and after Hurricanes Hermine, Matthew, Irma, Maria, and Nate.
IRMA & MATTHEW – City of Starke staffed a Hotline for after-hours outages; Bradford County Sheriff's Office staffs the 911 call line; and the Bradford County Emergency Operations Center (EOC) was staffed
- 14. Please provide the number of customer service representatives the Utility had during Hurricanes Hermine, Matthew, Irma, Maria, and Nate.
 - a. Were there additional personal deployed or 3rd party entities utilized to help address customer contacts during each named storm event? If so, how many?
IRMA & MATTHEW – City of Starke Hotline was staffed; No 3rd party entities used to staff; Bradford County Sheriff's Office (BCSO) staffs the 911 Call Center; and Bradford County EOC was staffed with a mix of BCSO, Starke Police Dept.; And City of Starke staff.

15. Please provide the number of customer contacts received by the customer call center(s) during Hurricanes Hermine, Matthew, Irma, Maria, and Nate.
IRMA – City of Starke Hotline received 299; BCSO 911 and EOC received 68 calls;
MATTHEW – BCSO 911 and EOC received 59 calls
16. Please provide all methods (call centers, email, Utility website, etc.) utilized to submit and collect customer contacts before, during, and after Hurricanes Hermine, Matthew, Irma, Maria, and Nate.
IRMA & MATTHEW – City of Starke Hotline, City of Starke website, emails, BCSO 911 dispatch, EOC, customer contact made out in the field by line crews
17. Please describe the step by step process(es) by which customer contacts are addressed before, during, and after a named storm event. If different during each timeframe, please describe the step by step process during each separately.
 - a. Did the Utility identify any delays in restoration as a result of addressing customer contacts related to Hurricanes Hermine, Matthew, Irma, Maria, and Nate? If so, please provide detail.
IRMA & MATTHEW - no delays in addressing all customer contacts due to power outages before, during or after hurricane. Customer contact made out in field by line crew.
18. Please provide whether or not customer contacts are categorized (by concern, complaint, information request, etc.) If so, how are they categorized? If not, why not?
IRMA & MATTHEW - Starke Shands Hospital was number one priority along with 4 Assisted Living Facilities; and any special needs customers at home followed by all other requests in order by time received.
19. Please provide a detailed description of how customer service representatives are informed of restoration progress.
IRMA & MATTHEW - reports regularly made to the call centers.(BCSO 911, EOC, City of Starke Hotline)
 - a. Is there a script provided to each customer service representative to relay restoration progress to customers? If so, what is the process by which the script is created? **IRMA & MATTHEW** - No script provided.
20. Please describe the process the Utility uses to notify customers of approximate restoration times. The response should include at a minimum
IRMA & MATTHEW – City of Starke website, via phone calls to hotlines, 911 or EOC:
 - a. How restoration time estimates were determined – by the line crews at the location of restoration.
 - b. How customers are notified – in person by the line crews.
 - c. How restoration time estimates are updated call ins to FMEA.
 - d. How restoration time estimates are disseminated internally, to the county and state Emergency Operations Centers, by phone, the City of Starke Hotline, EOC and BCSO 911

Material Considerations

21. Regarding Hurricanes Hermine, Matthew, Irma, Maria, and Nate, please provide a description of how vehicle fuel was procured for Utility personnel and mutual aid partners. As part of the response, please answer the following:
- Whether or not the Utility has fuel stored for these types of events
IRMA and MATTHEW – have a fuel station with a generator
 - Whether or not fuel shortage was an issue during these events
IRMA and MATTHEW - No
 - Whether or not there were any delays due to fuel shortage
IRMA and MATTHEW - None
 - Whether or not there were enough vehicles available during these events/any issues mobilizing crews
IRMA and MATTHEW - Yes
22. Please detail any complications or delays such as shortage or delayed delivery of materials for Hurricanes Hermine, Matthew, Irma, Maria, and Nate.
IRMA and MATTHEW - None

Restoration Process

23. Please provide a summary timeline of the utility's restoration process for each hurricane: Hermine, Matthew, Irma, Maria, and Nate. The timeline should include, but not limited to, staging, stand-down, deployment, re-deployment, allocation, mutual aid, release of mutual aid, and date last outage was restored.
- IRMA** –
9/8/17 – called for mutual aid
9/9/17 – staging crews at the City Yard
9/10/17 – Stand Down
9/11-14/17 – Deployment
9/15/17 – fully restored
9/16/17 – released mutual aid
MATTHEW – staged at our city yard for mutual aid crews, released mutual aid crews on 10/13/16, power restored 10/13/16
24. Please explain how the Utility validates adherences and departures from its storm preparation plan. (No departure from Comprehensive Emergency Management Plan)
- If the Utility does not assess departures from its storm plan, explain why not.
MATTHEW – written log sheets
 - If the Utility does not document or otherwise memorialize departures from its storm plan, explain why not.
 - Have departures from the Utility's storm preparation plan resulted in modification of the storm preparation plan during 2015 through 2017? If so, please explain how with examples.
25. Please explain how the Utility validates adherences and departures from its storm restoration plan. (No departure from Comprehensive Emergency Management Plan)

- a. If the Utility does not assess departures from its storm restoration plan, explain why not.
- b. If the Utility does not document or otherwise memorialize departures from its restoration storm plan, explain why not.
- c. Have departures from the Utility's storm restoration plan resulted in modification of the storm restoration plan during 2015 through 2017? If so, please explain how with examples.

IRMA & MATTHEW - no

Outages

- 26. Please identify all counties, including reporting regions/division for each county if applicable, that were impacted (had outages or damage) due to Hurricanes Matthew, Hermine, Irma, Maria, and Nate.

IRMA and Matthew – City of Starke in Bradford County

- 27. Please complete the table below summarizing the wind speed and flooding impacts by county in the utility's service area. If the requested information is not available by county, please provide the information on a system basis. Please provide this information for Hurricanes Matthew, Hermine, Irma, Maria, and Nate.

Storm	Weather Impact				
	County	Maximum Sustained Winds (MPH)	Maximum Gusts (MPH)	Maximum Rainfall (inches)	Maximum Storm Surge (Feet)
MATTHEW	Bradford	40	65	6	None
IRMA	Bradford	45	70	15	None

Hardened and Non-Hardened Structures

- 28. Please provide a county map or graphic indicating the geographic locations where the Utility's infrastructure was storm hardened after 2006. For purposes of this question, do not include vegetation management.

29. Please complete the table below summarizing hardened facilities that required repair or replacement as a result of Hurricanes Matthew, Hermine, Irma, Maria, and Nate.

Hardened Facilities - IRMA		
Hurricane	Number of Facilities Requiring	
	Repair	Replacement
<i>Transmission</i>		
Structures		
Substations		
Total	none	none
<i>Distribution</i>		
Poles		
Substation		
Feeder OH		
Feeder UG		
Feeder Combined		
Lateral OH		
Lateral UG		
Lateral Combined		
Total	none	none
<i>Service</i>		
Service OH		
Service UG		
Service Combined		
Total	none	none

Hardened Facilities - MATTHEW		
Hurricane	Number of Facilities Requiring	
	Repair	Replacement
<i>Transmission</i>		
Structures		
Substations		
Total	none	none
<i>Distribution</i>		
Poles		
Substation		
Feeder OH		
Feeder UG		
Feeder Combined		
Lateral OH		
Lateral UG		
Lateral Combined		
Total	none	none
<i>Service</i>		
Service OH		
Service UG		
Service Combined		
Total	none	none

30. Please complete the table below summarizing non-hardened facilities that required repair or replacement as a result of Hurricanes Matthew, Hermine, Irma, Maria, and Nate

Non-Hardened Facilities - MATTHEW		
Hurricane	Number of Facilities Requiring	
	Repair	Replacement
<i>Transmission</i>		
Structures		
Substations		
Total	0	0
<i>Distribution</i>		
Poles	150	7
Substation		
Feeder OH		
Feeder UG		1
Feeder Combined		1
Lateral OH	60	
Lateral UG		
Lateral Combined	7	
Total	217	8
<i>Service</i>		
Service OH	53	
Service UG	2	
Service Combined		
Total	55	0

Non-Hardened Facilities - IRMA		
Hurricane	Number of Facilities Requiring	
	Repair	Replacement
Transmission		
Structures		
Substations		
Total	none	none
Distribution		
Poles	24	24
Substation		
Feeder OH	17	
Feeder UG		1
Feeder Combined	3	
Lateral OH	33	
Lateral UG	1	
Lateral Combined	16	
Total	94	25
Service		
Service OH	80	
Service UG		
Service Combined		
Total	80	

31. For Hurricanes Matthew, Hermine, Irma, Maria, and Nate, please provide a ranking of the five highest volume of outage causation that impacted the Utility's service area.

IRMA

- 1 – Substation at Call & Regrave
- 2 – Hospital at Call & Colley
- 3 – BTU-Votec on Weldon
- 4 – Todd Rd & Weldon
- 5 – Oak St & Connie

IRMA & MATTHEW – The entire city power grid was out due to winds, downed trees, flooding

32. For Hurricanes Matthew, Hermine, Irma, Maria, and Nate, please provide a ranking of the top five drivers that protracted service restoration time.

IRMA - The entire city power grid was out due to winds, downed trees, flooding

- 1 – Substation Call & Redgrave
- 2 – BTU Votec on Weldon
- 3 – Oak & Connie
- 4 – Todd Rd & Weldon
- 5 – SR 100 & stansberry

MATTHEW - None

33. If applicable, please describe any damage prevented by flood monitors during Hurricanes Matthew, Hermine, Irma, Maria, and Nate.
IRMA - None
MATTHEW - None
34. How many outages were avoided by automated feeder switches during Hurricanes Matthew, Hermine, Irma, Maria, and Nate? Please explain how the data for each event was collected.
IRMA - none
MATTHEW - None

Critical Infrastructure Restoration

35. Please complete the table below for all critical infrastructure facilities (CIFs), by location (city/county) and facility type, which lost power, the restoration time for the CIFs and the cause of the outage (such as wind, storm-surge, flooding, debris, etc.) and facilities structure type that required replacement and/or repair. Please provide this information for Hurricanes Matthew, Hermine, Irma, Maria, and Nate.

Hurricane MATTHEW – CIF						
CIF Name/Type (i.e. Hospital)	County/ Location	Restoration Time	Outage Cause	Number of Facilities Requiring		
					Repair	Replace
Shands Starke	Bradford	6 Hr	Wind damage			
				<i>Transmission</i>		
				Structures		
				Substations		
				Total		
				<i>Distribution</i>		
				Poles		
				Substation		
				Feeder OH		
				Feeder UG		
				Feeder Combined		
				Lateral OH		
				Lateral UG		
				Lateral Combined		
				Total		
				<i>Service</i>		
				Service OH		
				Service UG		
				Service Combined		
				Total		

Hurricane IRMA – CIF						
CIF Name/Type (i.e. Hospital)	County/ Location	Restoration Time	Outage Cause	Number of Facilities Requiring		
					Repair	Replace
Shands Hospital	Starke	16 hours	Trees			
Riverview Nursing Homer	Colley Road	24 hours	Trees	<i>Transmission</i>		
Windsor Nursing Home	SR100	24 hours	Trees	Structures		
Southside Elementary	Colley road	24 hours	Trees	Substations	1	
BUTC	Weldon	40 hours	Trees	Total	1	
Starke Elementary	Weldon	40 hours		<i>Distribution</i>		
				Poles		16
				Substation		
				Feeder OH	17	
				Feeder UG		1
				Feeder Combined	3	
				Lateral OH	33	
				Lateral UG	1	
				Lateral Combined	16	
				Total	70	17
				<i>Service</i>		
				Service OH	80	
				Service UG		
				Service Combined		
				Total	80	

Underground Facilities

36. Please provide an assessment of the performance of underground facilities during Hurricanes Matthew, Hermine, Irma, Maria, and Nate. As part of this assessment please summarize the number of underground facilities that required repair or replacement for each event.
IRMA – replaced underground at BUTC (Bradford-Union Technical Center) on Weldon Street
MATTHEW – Replaced the feeder from substation to pole
37. Please provide a discussion what programs/tariffs the utility has in place to promote
- a. Undergrounding of new construction (e.g., subdivisions)
IRMA/MATTHEW - None
 - b. Conversion of overhead to underground
IRMA/MATTHEW - None

Staff's First Data Request
Docket No. 20170215-EU
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Please file all responses electronically no later than December 15, 2017 from the Commission's website at www.floridapsc.com, by selecting the Clerk's Office tab and Electronic Filing Web Form. Please contact me at wtaylor@psc.state.fl.us or at 850.413.6175 if you have any legal questions, or contact Emily Knoblauch for technical questions at eknoblau@psc.state.fl.us or at 850.413.6632.

Sincerely,

/s/Wesley Taylor

Wesley Taylor
Attorney

WDT/as

cc: Office of Commission Clerk
Office of Public Counsel (kelly.jr@leg.state.fl.us, sayler.erik@leg.state.fl.us)