All questions are answered from Mount Dora's Irma experience. No special restoration efforts took place during Hermine and Matthew

1. Please describe the pre-storm coordination process for Hurricanes Hermine, Matthew, Irma, Maria, and Nate. The description should include:

   IRMA

   a. Dates and topics of internal meetings held after each storm was named.
   9/6/2017 Governor CEO Call
   9/7/2017 city-wide hurricane Prep, EOC setup
   9/9/2017 City field staff debris removal & completing ICS214 report
   9/10/2017 2 EOC meetings on planning and logistics
   9/10/2017 Governor CEO Call

   b. Dates and topics of external communication pertaining to mutual aid held after each storm was named. N/A

   c. Date mutual aid was requested and nature of request.
   Mutual aid was requested on 9/13/2017. We spoke to Dalton GA who was already in the state and asked them to come to Mount Dora.

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

Supervisor	Assign jobs to crew, respond to emergencies, Carried out the plan	1
Lineman	Assess distribution system, repair distribution system.	8
Manager	Planned restoration setting priorities, reported updates to EOC, Kept track of restoration spreadsheet, Worked with PIO to develop messaging for customers	2
Assessors	Assess the distribution system	2

3. When did the costs for Hurricanes Hermine, Matthew, Irma, Maria, and Nate begin to accrue for receiving mutual aid?

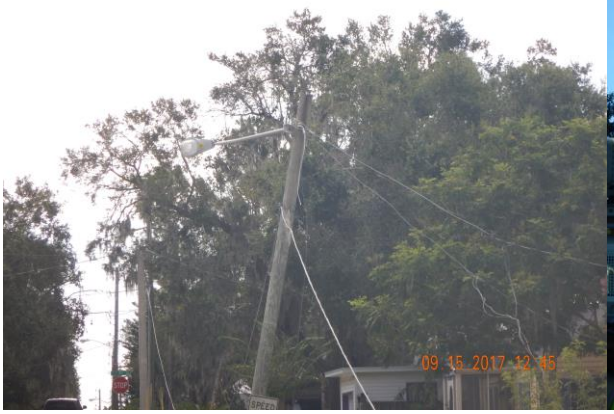
   IRMA - As of 9/13/2017

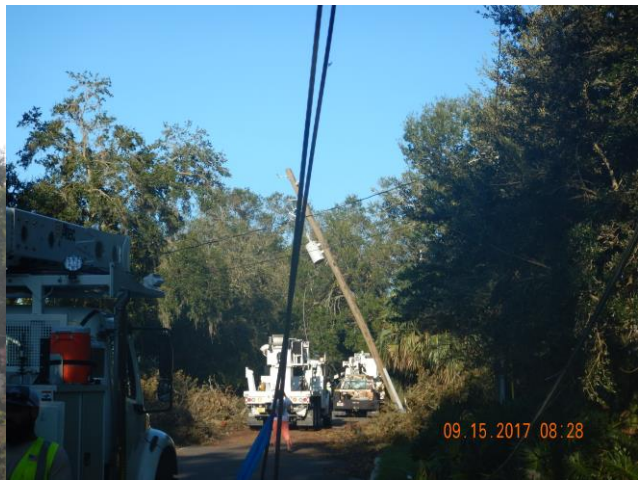
4. Please provide a detailed overview of the initial damage assessment process for Hurricanes Hermine, Matthew, Irma, Maria, and Nate, including the number of utility employees or contractors involved, their duties, and how initial damage assessment is disseminated within the utility to assist in restoration activities. Additionally, please provide photographs or other visual media that memorializes storm damage, which was documented during the initial damage assessment process.

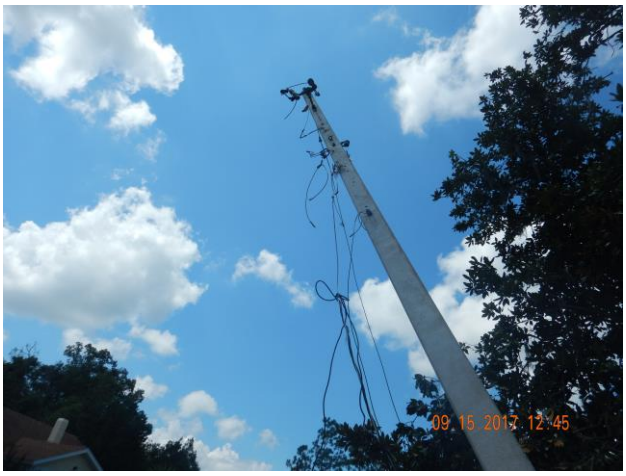
   IRMA

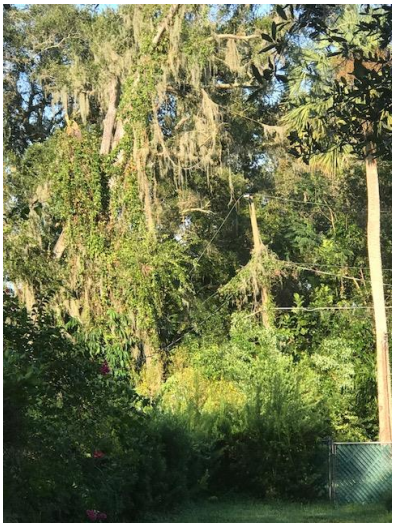
   Eleven employees participated in damage assessment. Damage assessment started Monday afternoon as soon as it was safe to go into the field. They completed substation assessment

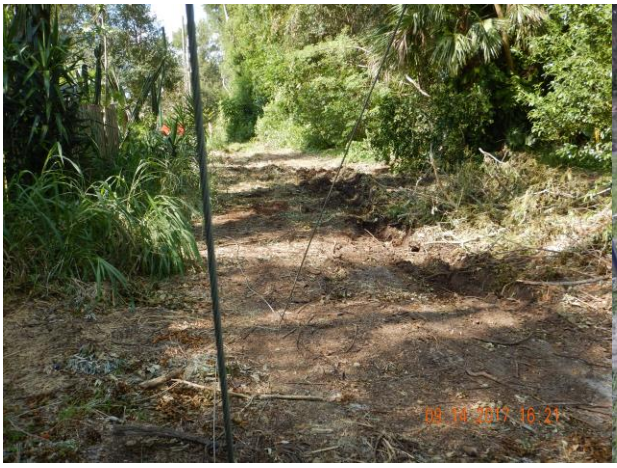
first which was out due to Duke Energy Transmission lines. Then they moved to the six circuits on the distribution system; damage assessment was completed by filling out the assessment form for each of the six circuits. Each damaged area from the assessment forms was assigned a job number and tracked on a spreadsheet. The damage locations were also marked on a map. A sample form and pictures are shown below.

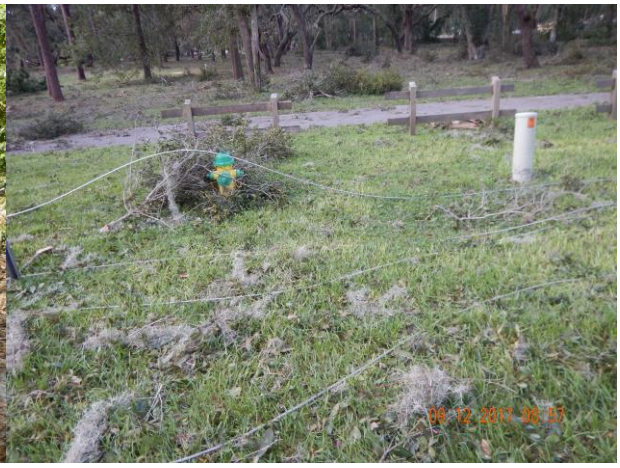












City of Mount Dora - Electric Division

Circuit Number 597
Date 9-13-17
Prepared By Ant-Sal

Damaged Lateral Line

No.	Cutout Pole No.	Cutout Phase	Cutout Location	Customers Out	Damage Description
1	5040	B	1408 9th	3	Single pH and Neutral
2	4955	C/A	Simpson/ H.S. Field Hse	1	tree on lateral service
3	5345	B C A	Lincdn/ unsee (Behind Hallmark)	Ø	cut jumpers to isolate main line
4	4951	B	5th/ Rossister	3	single & neutral
5					
6					
7					
8					
9					
10					

U:\Fuserv\Electric\ADMIN\Disasters & Recovery\Hurricane Irma\Damage Assessment\Damaged Lateral Line.xlsx

Sample Assessment Form used for Irma

5. Please provide a description of how damage assessment data is updated and communicated internally.

IRMA

The assessment data was entered on forms and marked on maps based upon input from field personnel. To summarize the data, a spreadsheet was created assigning each damaged area a job number. This spreadsheet was used to prioritize and track restoration efforts.

6. Please provide a detailed description of how the utility determines when and where to start restoration efforts.

IRMA

We started restoration when the winds subsided enough to use the bucket trucks safely. Utilizing the priority restoration list, restoration efforts started at the substation, and then moved to the main feeders.

7. For Hurricanes Hermine, Matthew, Irma, Maria, and Nate, please complete the following table on workload priority:

Personnel Responsible for Restoration Workload Assignments IRMA		
Title	Years of experience	Number of crews managed
Line Supervisor	37	3
Deputy Director	30	Assisted in managing the 3 crews

8. Please provide a description of how restoration workload adjusts based on work completed and updates to damage assessments.

IRMA- The damage assessment spreadsheet was updated as jobs were completed and assignments made depending on priority.

9. If applicable, please describe how mutual aid was determined to be no longer needed following Hurricanes Hermine, Matthew, Irma, Maria, and Nate.

IRMA – The mutual aid crews were released, once the total workload was reduced such that only a few services were left and able to be completed by Mount Dora resources.

10. Regarding Hurricanes Hermine, Matthew, Irma, Maria, and Nate, please respond to the following, please provide the following: **IRMA**

a. Days of lodging provided for Utility personnel (Person-Days) **20 person-days 9/9. 9/10**
b. Days of lodging provided for mutual aid partners (Person-Days) **24 person-days 9/12, 9/13**
c. Number of meals provided for Utility personnel **19 meals**
d. Number of meals provided for mutual aid partners **6 meals**
e. Number of Utility personnel injuries **0**
f. Number of mutual aid partner injuries **0**

g. Number of Utility personnel fatalities **0**
h. Number of mutual aid partner fatalities **0**

Please note any delays in restoration associated with items e-h above.

None

11. Please provide a detailed description of when your Utility was considered fully restored from each named storm event. IRMA - Mount Dora was considered fully restored on 9/16/2017 once all primary repairs were completed and all service repairs that were ready to be completed by utility personnel were done. These service repairs were the responsibility of the customer who had to engage electrical contractors.

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.

IRMA

a. Total number of customer accounts all customers 5,682
b. Peak number of outages all customers, 5,682

13. Please provide how call center customer service representatives were utilized before, during and after Hurricanes Hermine, Matthew, Irma, Maria, and Nate.

IRMA

All calls were routed to the EOC just before and during the storm. Utility and police staff answered those calls. After the storm on Tuesday two additional Customer Service Reps (CSR) answered phones. On Wednesday, Thursday, and Friday. 10 CSR answered phone calls.

14. Please provide the number of customer service representatives the Utility had during Hurricanes Hermine, Matthew, Irma, Maria, and Nate.
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 - Five regular Customer Service employees; Five additional staff members from Finance and Public Works.

15. Please provide the number of customer contacts received by the customer call center(s) during Hurricanes Hermine, Matthew, Irma, Maria, and Nate.
IRMA - This information is not available. Our phone system does not have the ability to track this.

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 - Phone, Social Media

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.

IRMA

Before

- Calls are taken and addressed depending on their needs.
- Social media is monitored and addressed as contacts come in.

During Storm

- Calls are taken and normally customers are told they must wait until the storm clears and it is safe to address their need. (During Irma we told them we were waiting on Duke Energy to repair the transmission.)
- Social media is monitored and customers are told they must wait until the storm clears and it is safe to address their need.

After Storm

- Calls are taken and a log is created to help identify areas with issues (This was mainly done after Duke Energy brought the transmission back up).
- Social media is monitored and addressed with generic information. Critical information from social media to help with restoration is given to the Deputy and Supervisor.

18. 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 - No

19. Please provide a detailed description of how customer service representatives are informed of restoration progress. IRMA

On a routine basis throughout the day the Line Supervisor would hold an update meeting with the call takers.

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?

Yes, Our Public Information Officer created a short template to be given to the call takers.

20. Please describe the process the Utility uses to notify customers of approximate restoration times. The response should include at a minimum: IRMA

a. How restoration time estimates were determined. Restoration times were based upon field information and estimates of repair time

b. How customers are notified. Customers were notified every three hours by the city home website page, all city Facebook pages, Twitter, and Code Red

c. How restoration time estimates are updated. A review of field repairs every three hours

d. How restoration time estimates are disseminated internally, to the county and state Emergency Operations Centers, and to the public. The Utility Director updated the

information daily based on completed restoration reports from the field, and emailed this out.

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:
    a. Whether or not the Utility has fuel stored for these types of events
    b. Whether or not fuel shortage was an issue during these events
    c. Whether or not there were any delays due to fuel shortage
    d. Whether or not there were enough vehicles available during these events/any issues mobilizing crews

    IRMA - Fuel is purchased and stored on site. The fuel we had on site was enough to get us through Irma and no delays were caused by fuel shortage. We did not have trouble with vehicle availability.

22. Please detail any complications or delays such as shortage or delayed delivery of materials for Hurricanes Hermine, Matthew, Irma, Maria, and Nate.

    IRMA

    We did not experience any shortage on material while restoring power. We did have to wait a little while for street light material.

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

    9/06 – 9/09 Preparing for the Hurricane
    9/09 - 9/11 Staged in designated area during hurricane
    9/11 - 9/12 Assessed and cleared feeders prepping for restoration (waited for Duke Energy to restore power to the Mount Dora substation)
    9/12 Duke Energy restores transmission to Mount Dora substation at 7:30pm
    9/12 Energized all main feeders and most laterals beginning at approximately 7:30pm
    9/13 - 9/14 Restored power to damaged laterals
    9/14 Mutual aid from Dalton GA came to assist
    9/14 – 9/15 Completed lateral restoration
    9/16 Completed all services that could be energized; Dalton released
    9/18 – 10/ 20 Repaired streetlights and cleaned up after storm

24. Please explain how the Utility validates adherences and departures from its storm preparation plan.
    a. If the Utility does not assess departures from its storm plan, explain why not.
    b. If the Utility does not document or otherwise memorialize departures from its storm plan, explain why not.

IRMA - After the storm, the incident commander held several after-action meetings. In these meetings the storm plan was discussed and status of these changes are being tracked.

    c. 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.

IRMA - We are in the process of making changes and documenting them this year in preparation for next year storm season.

25. Please explain how the Utility validates adherences and departures from its storm restoration 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.

See above question

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 – Lake 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.

Weather Impact				
County	Maximum Sustained Winds (MPH)	Maximum Gusts (MPH)	Maximum Rainfall (inches)	Maximum Storm Surge (Feet)
Lake	43 MPH	69 MPH	9" – 10"	

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.

A city storm hardening project is ongoing in which we are replacing wood pole on main feeder to concrete poles. (A map of the change-outs are not available.) Also, the city requires all new and upgraded services to go underground, and all new residential and office park developments to be installed underground.

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**
Transmission		
Structures	Duke Energy	Duke Energy
Substations	Duke Energy	Duke Energy
Total		
Distribution	None	None
Poles	None	None
Substation	None	None
Feeder OH	None	None
Feeder UG	None	None
Feeder Combined	None	None
Lateral OH	None	None
Lateral UG	None	None
Lateral Combined	None	None
Total		
Service		
Service OH	None	None
Service UG	None	None
Service Combined	None	None
Total		

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 IRMA		
Hurricane	**Number of Facilities Requiring**	
	Repair	**Replacement**
Transmission		
Structures	Duke Energy	Duke Energy
Substations	Duke Energy	Duke Energy
Total		
Distribution		
Poles	0	2
Substation	0	0
Feeder OH	6	0
Feeder UG	0	0
Feeder Combined	0	0
Lateral OH	38	0
Lateral UG	0	0
Lateral Combined	0	0
Total	**40**	**2**
Service		
Service OH	103	0
Service UG	1	0
Service Combined	0	0
Total	**104**	**0**

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. Trees down pulling wires down
2. Trees in lines
3. Wind blowing lines together
4. Equipment failure

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

1. Waiting on Duke Energy to restore transmission power
2. Back lot line restoration
3. Clearing tree damage

33. If applicable, please describe any damage prevented by flood monitors during Hurricanes Matthew, Hermine, Irma, Maria, and Nate.

N/A

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. N/A

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 (Name) – CIF						
CIF Name/Type (i.e. Hospital)	**County/ Location**	**Restoration Time**	**Outage Cause**	**Number of Facilities Requiring**		
					Repair	**Replace**
Police/ Fire Dept.	Lake	48 hrs.	Duke Energy	***Transmission***	2	
				Structures		
				Substations		
				Total		
				Distribution		
				Poles		
				Substation		
				Feeder OH		
				Feeder UG		
				Feeder Combined		
				Lateral OH		
				Lateral UG		
				Lateral Combined		
				Total		
				Service		
				Service OH		
				Service UG		
				Service Combined		
				Total		

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. NONE

37. Please provide a discussion what programs/tariffs the utility has in place to promote

a. Undergrounding of new construction (e.g., subdivisions)

The city requires all new and upgraded services to go underground, and all new residential and office park developments to be installed underground.

b. Conversion of overhead to underground

None