Response for Homestead Energy Services - Homestead, Florida
Staff's First Data Request
Docket No. 20170215-EU

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.
   b. Dates and topics of external communication pertaining to mutual aid held after each storm was named.
   c. Date mutual aid was requested and nature of request.

Of the storms listed, Homestead Energy Services was only affected by **Hurricane Irma**.

a. Meetings – Hurricane Irma
   i. Wednesday 9/6/17 – Hurricane Preparation meeting
   ii. Thursday 9/7/17 – Hurricane Status and Preparations Updates
   iii. Saturday 9/9/17 – Hurricane Status and Outstanding Issues
   iv. Sunday 9/10/17 – Hurricane Weather Update, winds and duration
   v. Monday 9/11/17 – All Clear, Hurricane Assessment Plan
   vi. Tuesday 9/12/17 – Restoration Plan Update and Status
   vii. Wednesday 9/13/17 – Restoration Progress and Outstanding Issues
b. External
   i. Facebook live broadcasts from City EOC
      1. Sunday 9/10/17
      2. Monday 9/11/17
      3. Tuesday 9/12/17
      4. Wednesday 9/13/17
c. Mutual aid was requested on Tuesday, 9/5/2017 through Amy Zubaly of the Florida Municipal Electric Association (FMEA). The initial request was to augment our field work force by a factor of about 600%. With the initial request as follows:
   i. 15 – Assessors/Patrol personnel (vs. current staff of 3)
   ii. 25 – 3 man line crews (vs. current staff of 4 – 3man crews)
   iii. 8 – Tree Crews (vs. current staff of 2 crews)
   iv. 3 – Substation Crews (vs. current staff of 1 crew)
d. Additional requests for line workers were made following the initial request. The final numbers of mutual aid personnel added were:
   i. 7 – Assessors/Patrol (vs. current staff of 3)
   ii. 40 – 3 man line crews (vs. current staff of 4 – 3man crews)
   iii. 10 Tree Crews (vs. current staff of 2 crews)

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.

a. Assessors/Patrol/Safety Inspection personnel – 3 utility employees assigned. Responsible for performing assessments of damages to electrical circuits and marking up circuit maps to reflect problems seen in the field.
b. Logistics Support – 3 utility employees assigned. Responsible for ensuring sufficient lodging, food and beverages/ice are obtained prior to a severe weather event and replenished following the event for as long as necessary.
c. Line Crew personnel – 12 utility employees assigned. Responsible for repairing Distribution electrical infrastructure damaged by the severe weather and putting facilities back in service.
d. Local guides for Mutual Aid Crews – 8 City employees assigned. Responsible for assisting Mutual Aid crews with travel around the area, finding addresses, obtaining materials, running food and supplies, and fleet support as needed.
e. Tree Crews – 4 contract utility employees assigned. Responsible for clearing vegetation associated with downed power lines and power poles, and clearing away vegetation that hinders restoration of power.
f. Substation – 3 utility employees assigned. Responsible for repairing any substation or protection system damages caused by the severe weather event and putting substations back in service.
g. Dispatch – 6 utility employees assigned. Responsible for directing the storm restoration activities 24/7, tracking restoration progress, maintaining restoration records and ensuring all electrical circuit safety procedures are followed by field personnel.
h. Supervisory – 3 utility employees assigned. Responsible for oversight and successful and timely execution of all restoration activities.
i. Safety Supervisor – 1 utility employee assigned. Responsible for visiting field crews, as well as office support personnel, and ensuring all safety rules are followed.
j. Administrative – 3 utility employees assigned. Responsible for ensuring all proper records are maintained for FEMA and City purposes.
k. Procurement – 3 City employees assigned. Responsible for maintaining necessary storm stock, and issuing and ordering necessary materials to repair electrical infrastructure following a severe weather event.
l. Fleet – 3 City employees assigned. Responsible for fueling vehicles and keeping vehicles in good operating condition. Responsible for making repairs to City utility vehicles as needed.

3. When did the costs for Hurricane Irma begin to accrue for receiving mutual aid?
   a. Invoices began coming in on September 26, 2017.

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.

a. **Initial Damage Assessment Process:**
    i. Assessments to begin as soon as it is safe to travel. Employees to note the extent of damage as they travel in to work following the Hurricane.
    ii. Critical Infrastructure to be assessed first and brought on line as quickly as possible. Critical Infrastructure includes, but is not limited to; Homestead Hospital, Water Treatment Plant, Police Station, Fire Stations, and Nursing Homes.
    iii. Assessment information – Maps to be provided to all patrol personnel. Patrol personnel will include all engineering staff, supervisors, Meter Techs, Substation Electricians and any other qualified non-line personnel and contract personnel that are available.
        1. Critical Infrastructure to be assessed first.
        2. Feeder circuits to be assessed second and then lateral circuits. Maps to be marked up with locations of trouble spots. Trouble includes tree conditions, poles down and wires down. Each trouble location to be marked with a number and notes that correspond to the number will be included with the map.
        3. All marked up assessment maps to be stored in dispatch and copies made for crew personnel.
    iv. After the critical infrastructure has been restored, feeder circuits with the least amount of damage will be assigned to crews for repair work to begin.
    v. Feeder circuits with major damage will be worked next, along with lateral circuits with minor damage, to ensure the maximum number of customers can be brought back on line as quickly as possible.
    vi. Status of repairs and location of field personnel to be maintained on a white board in Dispatch.
    vii. Crew assignments for work will be handled by the General Foreman with the assistance of the Director and Assistant Director.

b. **Employees/Contractors and Duties:**
    i. Assessors/Patrol personnel – 3 utility employees, 4 Contract employees and 4 Mutual Aid employees assigned for Hurricane Irma. Responsible for printing out circuit maps, for performing assessments of damages to electrical circuits and marking up circuit maps to reflect problems seen in the field. Marked up circuit maps to be turned in to Dispatch supervisor upon completion of the assessment.
    ii. Dispatch Restoration Coordinator – 2 utility employees assigned for Hurricane Irma. (Typically the Director and Assistant Director of the Electric Utility.) Responsible for prioritizing repair work to assign to crews based on information from Assessments.
    iii. Field Crew Supervisor – 1 utility employee assigned for Hurricane Irma. Responsible for assigning and tracking the work given to line repair crews.
    iv. Dispatch personnel – 6 utility employees assigned. Responsible for tracking progress of restoration, maintaining records of outages and restoration percentages and ensuring field safety rules are adhered to.

c. **Dissemination of information internally**
    i. White board in Dispatch center provides status of main feeder circuit restoration
    ii. Restoration update with percent restored is discussed at daily morning meetings.
    iii. Crew leaders and supervisors/Dispatch personnel discuss operational needs/issues on an as needed basis.

d. **Assessment photographs attached in Appendix A.**

5. Please provide a description of how damage assessment data is updated and communicated internally.
   a. Damage Assessments are provided to Dispatch/System operations via marked up circuit maps. (Feeder circuits first, then lateral circuits)
   b. The original Damage Assessment Circuit maps are stored in Dispatch/System Operations.
   c. Copies of the marked up maps are provided to the crew responsible for repairing the given circuit. The crew makes all repairs to the circuit and advises the Dispatch/System Operations division once the circuit is completely repaired, and turns in their marked up circuit map with "Completed" and the Foreman's name and date on it.
   d. The percentage of repairs is updated at the end of every day by circuit and shown on the white board in the Dispatch area.
   e. An electronic board in Dispatch also shows which circuits are energized and which are de-energized.
   f. Once the circuit is fully complete, that status is noted on the white board.
   g. Employees are advised of overall daily progress at tailboard meetings conducted the first thing each morning.

Restoration Workload

6. Please provide a detailed description of how the utility determines when and where to start restoration efforts.
   a. Restoration efforts begin as soon as the winds subside to below 30 mph.
   b. Critical Infrastructure is assessed first and brought on line as quickly as possible. Critical Infrastructure includes, but is not limited to; Homestead Hospital, Water Treatment Plant, Police Station, Fire Stations, and Nursing Homes/Assisted Living Facilities.
   c. After the critical infrastructure has been restored, main feeder circuits with the least amount of damage are assigned to crews for repair work to begin. Level of damage is determined through the assessment process.
   d. Feeder circuits with major damage are worked next, along with lateral circuits with minor damage, to ensure the maximum number of customers can be brought back on line as quickly as possible.

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

Personnel Responsible for Restoration Workload Assignments		
Title	Years of experience	Number of crews managed
General Foreman	22	40
Line Foreman	25	8
Line Foreman	20	7
Line Foreman	19	8
Journeyman Lineman	19	5
Journeyman Lineman	28	7
Journeyman Lineman	20	5

8. Please provide a description of how restoration workload adjusts based on work completed and updates to damage assessments.
    a. A group of crews is given a specific area to work and they have a lead person supervising the team. Once the main backbone circuit or circuits in their area are fully restored (feeders), then the priority moves to the branch circuits (laterals). While restoring the lateral circuits, all single customer problems are corrected (if not a problem with customer owned facilities), and then the lateral circuit is energized. Customers with damage to customer owned facilities are left de-energized until they are able to correct the problems with their facilities.
    b. Once the assigned area has been fully restored, the group of crews is given their next assignment.

9. If applicable, please describe how mutual aid was determined to be no longer needed following Hurricanes Hermine, Matthew, Irma, Maria, and Nate.
    a. Mutual Aid crews were released after all customers had power 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)
        a. 21
    b. Days of lodging provided for mutual aid partners (Person-Days)
        a. 1817
    c. Number of meals provided for Utility personnel
        a. 550
    d. Number of meals provided for mutual aid partners
        a. 5451
    e. Number of Utility personnel injuries
        a. 0
    f. Number of mutual aid partner injuries
        a. 1
    g. Number of Utility personnel fatalities
        a. 0
    h. Number of mutual aid partner fatalities
        a. 0

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

11. Please provide a detailed description of when your Utility was considered fully restored from each named storm event.
    a. We were only impacted by Hurricane Irma. We were fully restored on 9/18/17.

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
    a. Miami-Dade County – 24,500
b. Peak number of outages
    a. Miami-Dade County – 24,500

13. Please provide how call center customer service representatives were utilized before, during and after Hurricanes Hermine, Matthew, Irma, Maria, and Nate.
    a. Only impacted by Hurricane Irma - All outage calls (always) go to a third party entity. Utility call center representatives were only handling billing and account questions. The third party entity geared up staffing a couple of days in advance of the hurricane.

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?
        a. All customer service representatives handling outage calls were through a third party. They had approximately 85 representatives handling calls and an automated self-service Voice Response system as well.

15. Please provide the number of customer contacts received by the customer call center(s) during Hurricanes Hermine, Matthew, Irma, Maria, and Nate.
    a. Hurricane Irma - 9,374

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.
    a. Hurricane Irma – Outage calls through 3rd party and into the Outage management System, calls to utility employees, on-line web entry of outages.

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.
        i. Customers call a standard number to report outages, both on a blue sky day and during a severe weather event. These outages go into our Outage Management System (OMS).
        ii. Customers can opt to speak with a live representative, use a self-service IVR or enter their outage via the City's website. All of these outages roll into the OMS.
        iii. Prior to a storm, the outages are dispatched to repair crews based on critical customers or emergencies first, then number of customers affected by the outage next.
        iv. During a storm, customers are advised via a scripted message on the outage call in number that we will not be responding to any outages until the storm has passed and winds have subsided to a level where it is safe to work in bucket trucks.

v. After the storm has passed, the customers are advised the utility is assessing damages and will provide an estimated time for restoration once the assessments are complete.
vi. Once determined, the customers are advised of the estimated full restoration time frame.
vii. After the full restoration date, customer calls are again used to prioritize restoration. The outages are dispatched to repair crews based on critical customers or emergencies first, then number of customers affected by the outage next.
viii. Customers are called back or sent a text to verify power is restored.

b. 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.
i. No

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?
a. Yes. They are broken into Billing types of calls, Informational calls and Outage calls. The Outage calls include multiple types such as wire down, pole down, tree in wire, wire arcing, pole fire, etc.

19. Please provide a detailed description of how customer service representatives are informed of restoration progress.
i. Daily calls with the management team for the third party call center.
ii. References provided to informational materials located on the City website.
iii. Facebook live broadcasts daily.

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?
i. Yes. The script is created by the Director of the Electric Utility and advises when full restoration is anticipated for all customers.

20. Please describe the process the Utility uses to notify customers of approximate restoration times. The response should include at a minimum:
a. How restoration time estimates were determined.
i. Full restoration times are estimated based on the number of poles down, major tree conditions and spans of wire and transformers found down in the assessments. Each situation is given a standard man-hour time frame for restoration and the total man-hours required for full restoration are then calculated. Based on field crew resources expected using utility personnel and mutual aid crews, a daily man-hour estimate for productive work is calculated. The total man-hours for full restoration are divided by the daily productive man-hours to get an estimate of the number of days that will be required for full power restoration.

b. How customers are notified.
i. City website
ii. Facebook live daily broadcasts

iii. Automated message on the outage phone number.

c. How restoration time estimates are updated.
   i. Only the full restoration date was provided and we met that.

d. How restoration time estimates are disseminated internally, to the county and state Emergency Operations Centers, and to the public.
   i. Daily meetings internally
   ii. Daily updates to City and County EOC
   iii. Daily updates through FMEA to the State

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
      a. Yes. Pre-storm we have reserve fuel stored up.
   b. Whether or not fuel shortage was an issue during these events
      a. Yes, initially when gearing up for Irma.
   c. Whether or not there were any delays due to fuel shortage
      a. Delays prior to the storm due to employees waiting in line for hours to get fueled up.
   d. Whether or not there were enough vehicles available during these events/any issues mobilizing crews
      a. For Irma, the biggest difficulty in mobilizing crews was getting them through the state, and down to us in the far southern end. They had to wait for the storm to pass through before they could travel south. The mutual aid crews also had difficulties in getting fuel as they traveled through the state of Florida.

22. Please detail any complications or delays such as shortage or delayed delivery of materials for Hurricanes Hermine, Matthew, Irma, Maria, and Nate.
   a. We ordered storm materials ahead of time and so did not have a major impact; we keep a higher inventory during hurricane season so that we're prepared should an event hit. We were short a few wire spices and FPL worked with us to get us some from their stock very quickly (within hours).

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.
   a. Hurricane Irma:
      i. Utility pre-storm meeting to discuss 72 hour plan – 9/5/17
      ii. Employees with logistics storm roles began securing hotel rooms and catering. 9/5/17.
      iii. Mutual Aid personnel request submitted to FMEA – 9/5/17

iv. Staging site selected and OK'd by City management – 9/6/17
v. About 10% of employees were staged at the Electric Utility site throughout the storm, ready to respond to outages as soon as able to safely do so.
vi. Stand-down for employees began when the wind gusts got over 30 mph – Saturday afternoon, 9/9/17.
vii. Employees on site began responding to outages post storm early on Monday morning, 9/11/17.
viii. Mutual Aid personnel began showing up on Tuesday evening, 9/12/17, and began providing support on Wednesday, 9/13/17.
ix. 99% of customers restored by Sunday evening, 9/17/17.
x. Last customer able to receive power was restored on 9/18/17.
xi. Customers who needed to make repairs to their facilities before they could be re-energized began calling in to have their services re-connected on 9/18/17.
xii. Mutual Aid crews remained working to assist with reconnects for those customers who completed the repairs to their facilities. They also assisted with hazardous conditions found which were caused by the hurricane and needing attention even though the associated customers were back in power.
xiii. Mutual Aid crews were released starting on 9/20 through 9/22/17.

24. Please explain how the Utility validates adherences and departures from its storm preparation plan.
    i. A post storm meeting is held to discuss lessons learned. This includes what went well, any storm processes that were not followed and any processes that need to be revised, deleted, or created.

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.
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.
    i. The Hurricane Plan is reviewed annually and revised as needed. One change that was added is moving the control of the work allocation from the engineering team to the Dispatch/System Operations team. This change was made following a post storm meeting in September 2015 for Tropical Storm Erika.

25. Please explain how the Utility validates adherences and departures from its storm restoration plan.
    i. Adherences and departure from the storm restoration plan are addressed in the post storm follow up meeting. The meeting is typically held within one to two weeks after the restoration activity wraps up.

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.

Outages

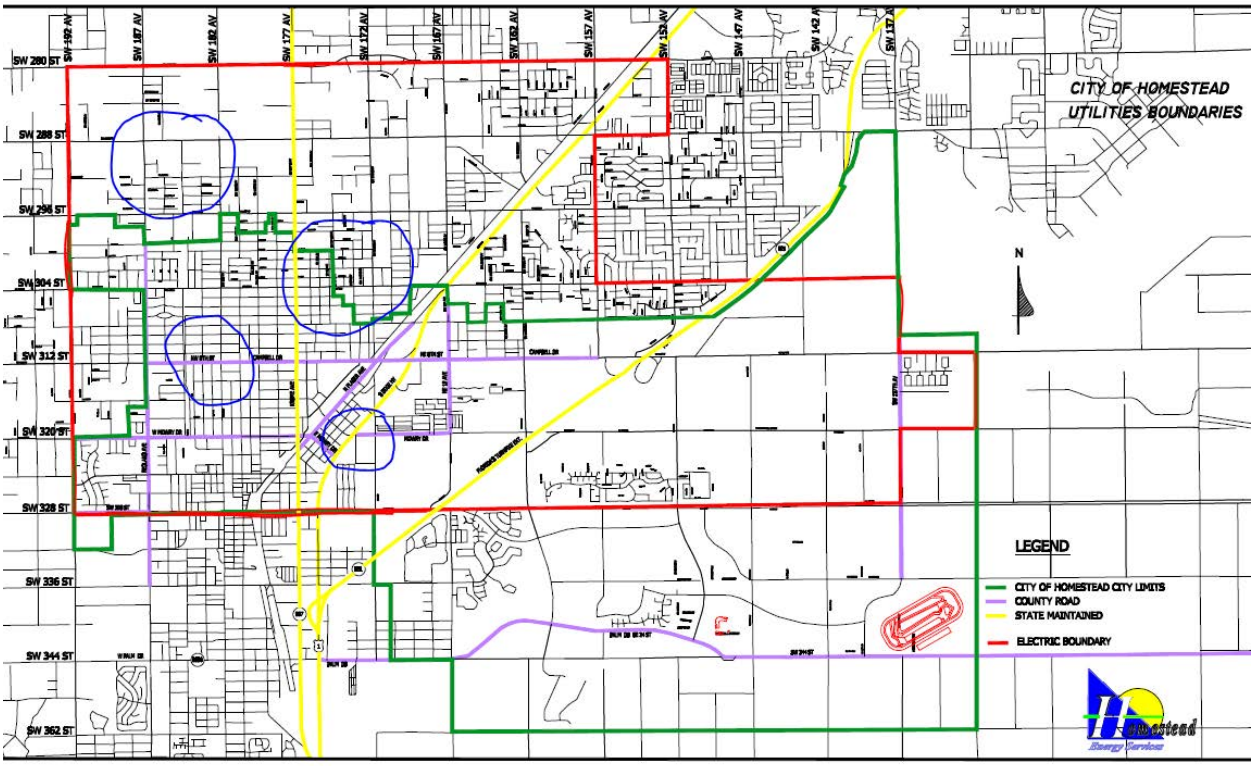
26. Please identify all counties, including reporting regions/division for each county if applicable, that were impacted (had outages or damage) due to Hurricanes Matthew, Hermine, Irma, Maria, and Nate.
    a. Hurricane Irma impacted our electric Utility. All of our service territory is in Miami-Dade 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)
Miami-Dade	64 MPH	93 MPH	6.45 Avg	4-6 Ft

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.
    a. Poles were replaced with more robust poles following an 8 year inspection cycle which started in 2009. The electric utility has not had an opportunity to replace all the poles identified as problematic. Any other poles that require replacement are replaced with larger, sturdier poles. Hardened areas circled in blue.



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		
Hurricane	**Number of Facilities Requiring**	
	Repair	**Replacement**
Transmission	None	None
Structures		
Substations		
Total		
Distribution	None	None
Poles		
Substation		
Feeder OH		
Feeder UG		
Feeder Combined		
Lateral OH		
Lateral UG		
Lateral Combined		
Total		
Service	None	None
Service OH		
Service UG		
Service Combined		
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		
Hurricane	**Number of Facilities Requiring**	
	Repair	**Replacement**
Transmission	None	None
Structures		
Substations		
Total		
Distribution		
Poles	45	162
Substation		
Feeder OH	15	
Feeder UG	4	
Feeder Combined	19	
Lateral OH	130	
Lateral UG	3	
Lateral Combined	133	
Total	197	
Service		
Service OH	1524	140
Service UG	12	2
Service Combined	1536	142
Total	1733	304

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.
    a. We were only affected by Hurricane Irma
        i. Trees
        ii. High Winds
        iii. Wire Splice failures
        iv. Customer equipment failures
        v. Transformer failures

32. For Hurricanes Matthew, Hermine, Irma, Maria, and Nate, please provide a ranking of the top five drivers that protracted service restoration time.
    a. We were only affected by Hurricane Irma
        i. Inability to get Mutual Aid crews through the state and down to us quickly.
        ii. Unavailability of Mutual Aid personnel due to the entire state needing resources
        iii. Massive amount of tree problems – could have used even more tree trimming crews

iv. No other major issues, resources were managed well and very productive once they arrived.

33. If applicable, please describe any damage prevented by flood monitors during Hurricanes Matthew, Hermine, Irma, Maria, and Nate.
    a. 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.
    a. We were only affected by Hurricane Irma. All of our feeder circuits were out immediately following the hurricane, so no outages were avoided. Some outages were later shortened in duration due to the use of automated switches.

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.
    a. We were only affected by Hurricane Irma

Hurricane (Name) – CIF						
CIF Name/Type (i.e. Hospital)	**County/ Location**	**Restoration Time**	**Outage Cause**	**Number of Facilities Requiring**		
					Repair	**Replace**
				Transmission		
				Structures		
				Substations		
				Total		
				Distribution		
Wastewater Treatment Plant	Miami-Dade County/Homestead	3 days	Broken poles	Poles	2	5
Homestead Hospital	Miami-Dade County/Homestead	3 hours	High Winds	Substation	Breaker reset	
17 Nursing Homes/Assisted Living facilities	Miami-Dade County/Homestead	1 – 5 days	Trees/High Winds	Feeder OH	25	
Police Station	Miami-Dade County/Homestead	2 days	Wire down – wire splices failed	Feeder OH	12	
The Palace Gardens – Assisted Living Facility	Miami-Dade County/Homestead	1 day	Wire down – wire splices failed	Feeder OH	2	
				Feeder UG		
				Feeder Combined		
				Lateral OH		
				Lateral UG		
				Lateral Combined		
				Total		
				Service		
				Service OH		
				Service UG		
				Service Combined		
				Total	42	5

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.

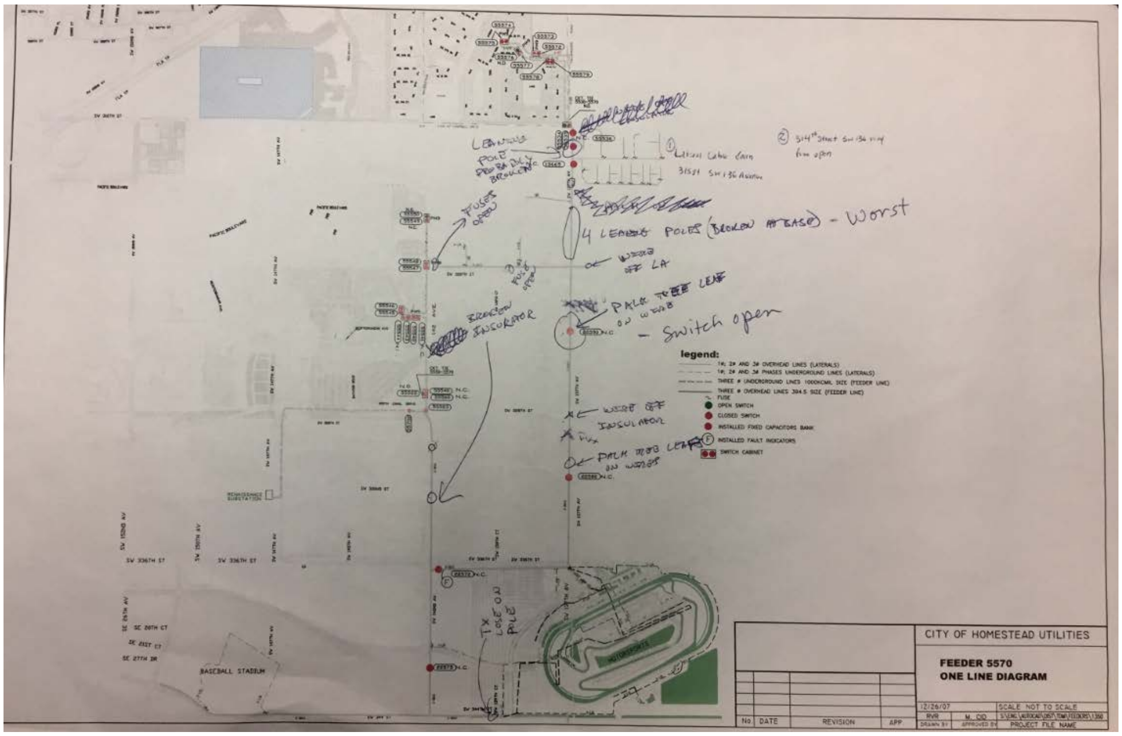
    a. We were only affected by Hurricane Irma

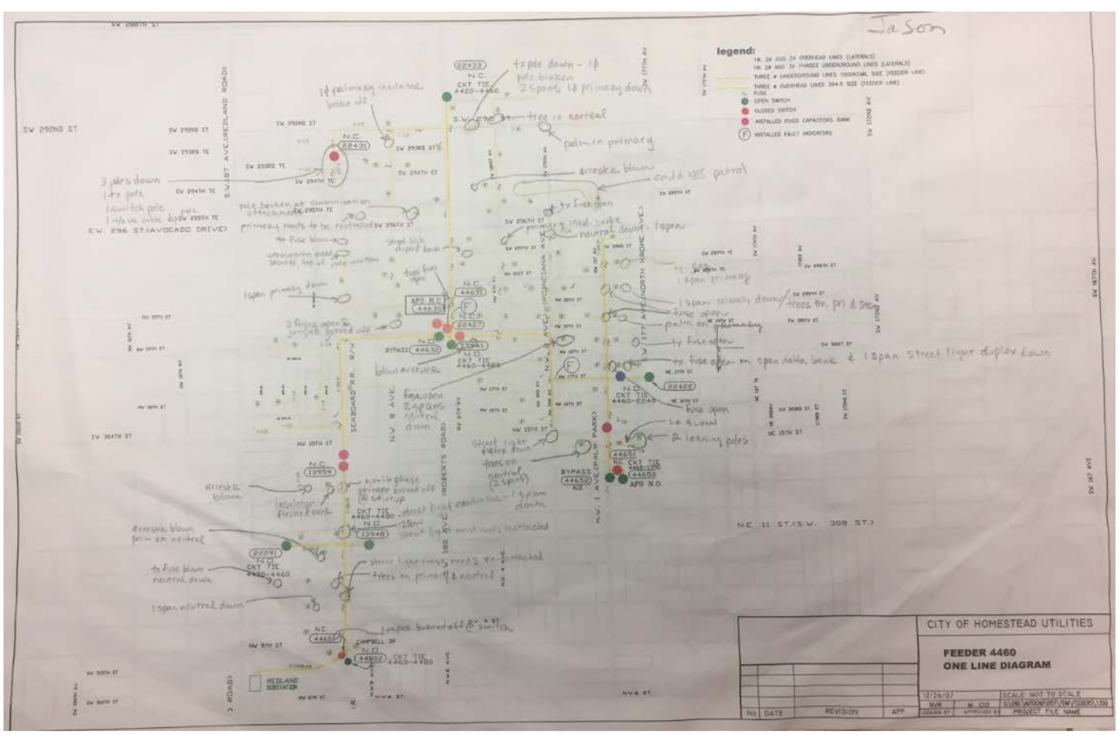
        i. Most of the underground infrastructure held up well. We had one underground lateral where there was an issue with the overhead feed to the lateral and two transformer situations where large downed trees knocked over underground transformers. There were a few underground services that had to be repaired due to the transformers being knocked over and the service wires getting pulled.

37. Please provide a discussion what programs/tariffs the utility has in place to promote
    a. Undergrounding of new construction (e.g., subdivisions)
        a. Requesting state and /or federal funding to assist with undergrounding
    b. Conversion of overhead to underground
        a. Certain circuits in commercial areas targeted for undergrounding.

APPENDIX A – ASSESSMENT PHOTOGRAPHS

Feeder Circuit Assessment Map – Examples





Damage Photos