

HURRICANE IRMA CITY OF GREEN COVE SPRINGS, FLA COMPLETED JANUARY 25, 2018

STAGING FOR UTILITY PERSONNEL AND MUTUAL AID

1. Please describe the pre-storm coordination process for Hurricane Irma. The description should include:
 - a. Dates and topics of internal meetings held after each storm was named.
[General order e-Mail sent on September 7, 2017 to all employees reminding them of their obligation to report to work.](#)
 - b. Dates and topics of external communication pertaining to mutual aid held after each storm was named.
[Communication with Clay County EOC and FMEA on Electric Utilities. Participated in daily update calls with FMEA and Office of the Governor.](#)
 - c. Date mutual aid was requested and nature of request.
[Request for Electric Crews and equipment on September 5. Received two crews from Troy Alabama and Evergreen, Alabama. Also utilized internal crews from Distribution Contractor Hooper Corporation.](#)

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.
[Customer Service Representatives \(\) – Phone Banks, Social Media](#)
[Executive Assistant to City Manager and City Clerk – Clay County Emergency Operations Center \(EOC\)](#)
[Sworn Law Enforcement Green Cove Springs Police Department \(GCSPD\) – Wellness checks, downed traffic signals, emergency dispatch, GCS Emergency Operations Center.](#)
[Electric Distribution Crews – Hooper Corporation and Mutual Aid via Hooper with crew from S. Florida.](#)
[Public Works – Rolling stock to remove storm debris; clear roadways after lines de energized.](#)
[Fleet maintenance Shop – Equipment servicing and fleet fueling.](#)
[Administrative Secretary – Meals and Lodging.](#)
[Finance Director – Damage Assessment Reporting](#)

3. When did the costs for Hurricanes Irma begin to accrue for receiving mutual aid?
[September 9, 2017 – September 16, 2017.](#)

DAMAGE ASSESSMENT PROCESS

4. Please provide a detailed overview of the initial damage assessment process for Hurricane Irma, 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. Public Works Crews and Police personnel provided field assessments; daily meetings with electric line personnel and the Administration to determine areas to be restored and when.

5. Please provide a description of how damage assessment data is updated and communicated internally. Daily field reports and work orders are entered into the system, as well as CAD entries with GCSPD to track outages and responses.

RESTORATION WORKLOAD

6. Please provide a detailed description of how the utility determines when and where to start restoration efforts. City prioritizes restoration based on if a critical facility is involved; number of customers affected by outage; extent of the damage; amount of manpower and resources that will be required to restore service. Goal is to energize the largest amount of customers in the most expedient manner. Outlying, isolated areas are usually one of the last areas for full service restoration. Many times in areas like this there may be one or two customers. Further, in some instances, service to the actual residence has been destroyed from debris, and in those instances the property owner must have an electrician restore their service *prior to* connection to the electrical grid.

7. For Hurricane Irma, please complete the following table on workload priority:

Personnel Responsible for Restoration Workload Assignments		
Title	Years of experience	Number of crews managed
Assistant City Manager	10	6
Electric Director	30	2

8. Please provide a description of how restoration workload adjusts based on work completed and updates to damage assessments. Daily debriefings are held and this determines the following day's assignments.
9. If applicable, please describe how mutual aid was determined to be no longer needed following Hurricane Irma. The Administration makes the final determination that coincides with the number of outage calls received and debris removal management. Once the GCSPD EOC is no longer operational is when we dismiss mutual aid.

STAFFING CONSIDERATIONS

10. Regarding Hurricane Irma, please respond to the following, please provide the following:
 - a. Days of lodging provided for Utility personnel (Person-Days) 5
 - b. Days of lodging provided for mutual aid partners (Person-Days) 5
 - c. Number of meals provided for Utility personnel 15
 - d. Number of meals provided for mutual aid partners 15

- e. Number of Utility personnel injuries **None**
 - f. Number of mutual aid partner injuries **One heat stroke**
 - 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. **September 16, 2017**

CUSTOMER COMMUNICATION

12. Regarding Hurricane Irma, please respond to the following for each county in the Utility's service territory affected by the storms.

Clay County for Green Cove Springs Only.

- a. Total number of customer accounts **3,800**
- b. Peak number of outages **3,800**

13. Please provide how call center customer service representatives were utilized before, during and after Hurricane Irma. **Customer Service Reps were located in the GCSPD EOC which was manned 24/7.**

14. Please provide the number of customer service representatives the Utility had during Hurricane Irma. **10**

- 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?

No.

15. Please provide the number of customer contacts received by the customer call center(s) during Hurricane Irma. **Our Customer Call Log documented over 200 calls to report either an outage or debris.**

16. Please provide all methods (call centers, email, Utility website, etc.) utilized to submit and collect customer contacts before, during, and after Hurricane Irma. **We used website, twitter, Facebook, and EOC Call Center.**

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. **Each call is logged into dispatch then categorized by type of service call, assigned to a crew, work assessed, work scheduled, and finally call back to customer to verify service restoration.**

- a. Did the Utility identify any delays in restoration as a result of addressing customer contacts related to Hurricane Irma? If so, please provide detail. **None noted.**

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? [See Reply to Item #17.](#)
19. Please provide a detailed description of how customer service representatives are informed of restoration progress. [Each CSR is given a daily update, along with a system map that shows what areas should have full service restored, which areas still have an outage, and what day we anticipate being in the field in that particular neighborhood.](#)
 - 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. Administration creates the script then distributes to the CSRs.](#)
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.
 - b. How customers are notified.
 - c. How restoration time estimates are updated.
 - d. How restoration time estimates are disseminated internally, to the county and state Emergency Operations Centers, and to the public.

[The City of Green Cove Springs employs Social Media. We have a website, twitter account, and Facebook. During this named storm, we issued fourteen \(14\) Public Service Announcements \(PSA\) beginning on September 6 and ending on November 2, 2017September 11, 2017. Additionally, we held a special Council meeting to update the Council and the public on September 12, 2017.](#)

[Likewise, the Clay County Emergency Management Department issued thirty-seven \(37\) PSAs beginning on September 6 and ending on December 4, 2017.](#)

MATERIAL CONSIDERATIONS

21. Regarding Hurricane Irma, 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. [Yes, we top off all of our above ground fuel storage tanks. We have one \(1\) 2,000 gallon diesel tank and one \(1\) 6,000 gallon unleaded tank.](#)
 - b. Whether or not fuel shortage was an issue during these events [Yes we did have some concerns that fuel was becoming scarce. However, we worked directly with local fuel stations.](#)
 - c. Whether or not there were any delays due to fuel shortage [None](#)
 - d. Whether or not there were enough vehicles available during these events/any issues mobilizing crews [Our concern was the out of state crew abilities to get to us since the traffic on major arteries \(I 75, I 10, I 95\) and so forth was backed up with mandatory evacuation orders issued to citizens. Suggest future plans should have some sort of contingency for moving supplies and mutual aid personnel quickly throughout the state without sacrificing mandatory evacuation orders for citizens.](#)

22. Please detail any complications or delays such as shortage or delayed delivery of materials for Hurricane Irma. [See Reply to Item # 21.](#)

RESTORATION PROCESS

23. Please provide a summary timeline of the utility's restoration process for each hurricane: Irma. 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. [Crews were staged in town as early as September 9. The major winds hit during the early morning hours through mid-day on September 11. Crews were out the afternoon of September 11 to assess damage and begin repairs as practical. Additional crews arrived on September 13. Restoration to 100% of our customers was complete on September 16. At that time, half of the mutual aid crews were releases. The remaining crews were released two days later after taking care of safety items such as severely leaning poles, low-hanging wires, etc.](#)
24. Please explain how the Utility validates adherences and departures from its **storm preparation plan**. [We have not failed to follow our Disaster Manual. We do updates as necessary based on real time simulations and actual storm events.](#)
- If the Utility does not assess departures from its storm plan, explain why not.
 - 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**. [Based on storm events, we have an after action meeting with all personnel to critique our performance and document means by which we can improve our service delivery.](#)
- If the Utility does not assess departures from its storm restoration plan, explain why not.
 - If the Utility does not document or otherwise memorialize departures from its restoration storm plan, explain why not.
 - 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 Hurricane Irma. [Clay County Only.](#)
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 Hurricane Irma. This information is reported by Clay County Emergency Management and National Weather Service. We rely on those agencies to determine our pre and post disaster protocols. Clay County issues evacuation orders.

Weather Impact				
County	Maximum Sustained Winds (MPH)	Maximum Gusts (MPH)	Maximum Rainfall (inches)	Maximum Storm Surge (Feet)

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.
No hardening activities have occurred with Green Cove Springs Utility at this time. However, we have identified areas for hardening post-Hurricane Irma.

29. Please complete the table below summarizing hardened facilities that required repair or replacement as a result of Hurricane Irma. *None*

Hardened Facilities		
Hurricane	Number of Facilities Requiring	
	Repair	Replacement
<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		

30. Please complete the table below summarizing non-hardened facilities that required repair or replacement as a result of Hurricane Irma.

Non-Hardened Facilities		
Hurricane	Number of Facilities Requiring	
	Repair	Replacement
<i>Transmission</i>		
<i>None</i>		
Structures		
Substations		
Total		
<i>Distribution</i>		
Poles		13
Substation		
Feeder OH	85	19
Feeder UG		
Feeder Combined		
Lateral OH		
Lateral UG		
Lateral Combined		
Total		
<i>Service</i>		
Service OH		
Service UG		
Service Combined		
Total		

31. For Hurricane Irma, please provide a ranking of the five highest volume of outage causation that impacted the Utility's service area. **First, trees, next wind, next rain, next debris, and last flooding.**
32. For Hurricane Irma, please provide a ranking of the top five drivers that protracted service restoration time. **Debris removal was our number one challenge.**
33. If applicable, please describe any damage prevented by flood monitors during Hurricane Irma. **None**
34. How many outages were avoided by automated feeder switches during Hurricane Irma? Please explain how the data for each event was collected. **No outages were avoided because we had major damage to the distribution lines coming into town from our main substation.**

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 Hurricane Irma.

Hurricane (Name) – CIF						
CIF Name/Type (i.e. Hospital)	County/ Location	Restoration Time	Outage Cause	Number of Facilities Requiring		
City Hall	Clay		System-wide damage		Repair	Replace
<i>County Admin Bldg</i>	Clay		System-wide damage	<i>Transmission</i>		
Kindred Hospital	Clay		System-wide damage	Structures		
GCSPD	Clay		System-wide damage	Substations		
Public Works Compound	Clay		System-wide damage	Total		
<i>WWTP</i>	Clay		System-wide damage	<i>Distribution</i>		
Clay High School (shelter)	Clay		System-wide damage	Poles		
Governors Creek Rehab	Clay		System-wide damage	Substation		
County Jail	Clay		System-wide damage	Feeder OH		
	Clay			Feeder UG		
	Clay			Feeder Combined		
	Clay			Lateral OH		
	Clay			Lateral UG		
	Clay			Lateral Combined		
				Total		
				<i>Service</i>		
				Service OH		
				Service UG		
				Service Combined		
				Total		

UNDERGROUND FACILITIES

36. Please provide an assessment of the performance of underground facilities during Hurricane Irma. As part of this assessment please summarize the number of underground facilities that required repair or replacement for each event. *We only have Underground infrastructure in 2 gated subdivisions. One sectionalizing cabinet required repair due to a blown fuse.*

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

- a. Undergrounding of new construction (e.g., subdivisions)
- b. Conversion of overhead to underground
- c. Our Land Dev Code requires all subdivisions to be constructed with underground service. Furthermore, all new commercial construction must be underground. We also require a Contribution in Aid of Construction, known as CIAC.

