

Town of Havana, Fl. Response to Review of Electric Utility Hurricane Preparedness and Restoration Actions- Applies only to Hermine and Irma. Maria and Nate posed no serious threat to Havana.

Staging for Utility Personnel and Mutual Aid

1. Hermine – Meeting dates were August 29th-31st, 2016 and September 1st, 2016. The purposes of the meetings were to discuss storm preparation. This included vehicle fueling, generators and other equipment fueling, reporting to work times, storm tracking updates and recovery procedures. On August 30, 2016 a request was made to the Florida Municipal Electric Association(FMEA) to provide mutual aid crews. Reservations were made at a Tallahassee hotel to provide accommodations. A local restaurant was notified to be ready to provide meals to the utility recovery workers.

On the morning of September 2, 2016, following the storm passing through Havana a damage assessment determined we didn't need any mutual aid crews. FMEA was notified we did not need any assistance. Our crews were able to completely restore the system by 2:00 p.m.

Irma – Meeting dates were September 4th, 5th, 6th 7th and 8th, 2017. The meetings' purpose was storm preparation topics. These included similar ones during Hermine. On September 6th a request for mutual aid crews was made to the Florida Municipal Electric Association(FMEA) and to the Electric Cities of Georgia(ECG). Hotel reservations for mutual aid crews were arranged at this time. Arrangements were made with a local restaurant for meals.

On the morning of September 11th, 2017, following the storm's passing through Havana a damage assessment determined we didn't need any mutual aid crews. FMEA and ECG were notified we did not need any assistance. Our crews were able to completely restore our system by 8:00 p.m.

2. Customer Service – communicate and inform our customers of storm related information. Field calls from customers advising of power outages. Answer customers' questions relating to restoration progress, hurricane shelter information and availability of food and water. Three to five personnel were available.

Maintenance Crew – Remove trees from right of way to keep roads open, assist with removing trees from power lines and debris removal. Four personnel are available.

Electric Crew – Electric distribution restoration. This includes reconnecting electrical services and replacing damaged distribution assets. Four personnel are available.

Town Manager – Coordinates all efforts in hurricane response. Attends all local emergency operation meetings. Surveys service territory pre-and post-storm landing. Reports corrective action instances to the dispatcher. Updates customer service representatives on storm restoration. One personnel is available.

Public Safety – Surveys service territory pre-and post-storm landing. Reports instances to dispatcher for corrective action. Utilized for traffic control. Six personnel are available.

Dispatcher – Dispatches crews for storm related maintenance. Two personnel are available.

This description of the utility’s allocation of storm duties applies to Hermine and Irma.

3. This question isn’t applicable to the Havana Electric System. We didn’t request mutual aid for any of the listed storms.

Damage Assessment Process

4. This question isn’t applicable to the Havana Electric System during these storms. Our damages were minimal.
5. The Town Manager performs an initial damage assessment to determine if damages are sufficient to warrant a more thorough assessment. If a thorough assessment is required the Town uses a service provided by our insurance carrier, the Florida League of Cities.

Restoration Workload

6. We determine restoration order priority based upon the order the outage occurred. We make an exception in this order to address a critical infrastructure outage. A critical infrastructure outage receives priority.
7. Personnel responsible for restoration work load assignments are:

Personnel Responsible for Restoration Workload Assignments		
Title	Years of Experience	Number of crews managed
Electrical Superintendent	10	1
Streets Dept Supervisor	25	1
Police Chief	13	1
Town Manager	20	4

8. Restoration workload adjustments occur in real time. We are a small system and are able to immediately communicate restoration issues with our crews. We take them in the order received. When one is completed we move on to the next one. Our supervisors are linked with our dispatcher through a private facebook account. The restoration requests are communicated through our cell phones via this Facebook account.
9. This question isn’t applicable. We didn’t request mutual aid during any of these storms.

Staffing Considerations

10. Zero days of lodging provided for personnel and mutual aid workers during Hermine; one day of lodging provided for personnel and zero days for mutual aid workers during Irma; two meals provided for Hermine and none for mutual aid during Hermine; three meals provided and none

for mutual aid during Irma; zero injuries and zero fatalities during Hermine and Irma. There were no delays with any of these items.

11. Our utility was fully restored after Hermine by 2:00 p.m. on September 2, 2016 and was fully restored after Irma by 8:00 p.m. on September 12, 2017.

Customer Communications

12. For Hermine we had a total of 1,437 customer accounts with peak outages of 632. For Irma we had a total of 1,455 customer accounts with peak outages of 734.
13. Call center customer service representatives were on duty the full time during the impacts of Hermine and Irma. They were used to field customer information regarding outages, complaints or shelter information. They notified our dispatcher of any outages.
14. The utility used three customer service representatives during the hurricanes.
15. The number of customer contacts received for Hermine were 74 and the number for Irma was 114.
16. Customer contact was requested and obtained by a direct mail out request.
17. Customer contacts are addressed by the customer service representatives when received. An outage is noted and passed along to the dispatcher. The representative gives an estimated restoration time. The representative informs the Town manager of any complaints. The Town manager addresses the complaints with the appropriate person. No delays in restoration resulted when addressing customer contacts.
18. Only categorized by emergency related or normal storm related. Storm related are addressed in the order received. Emergency related are given priority. The Town manager decides on the emergency related priority.
19. The customer service representatives are updated on restoration progress by the Town manager. No script is provided.
20. Storm restoration time estimates and updates to customer service representatives are determined and given by the Town manager. Customers are notified by telephone calls, Town manager visits or police department visits. The Town manager communicates restoration time estimates internally, to local officials, to the public and then to FMEA to report to the state EOC.
21. The Town purchases gasoline from two local vendors. One vendor reserved extra fuel for Town crew use only post storm landing. We make sure all vehicles are fueled 100% pre-storm landing. Our diesel storage capacity is 250 gallons. We make sure this is fueled 100% pre-storm landing. There were not any fuel shortage delays and we had sufficient vehicles during these storm events.
22. There were no delays or complications with materials for Havana during Hermine or Irma.
23. Hermine timeline:

8/29/16	9/2/16	9/2/16
Preparation	3:00 a.m.	2:00 p.m.
And storm	Deployment/	Full
Tracking	First storm	Restoration
	Events	

Irma timeline:

	9/4/17	9/10/17	9/11/17	9/12/17
Preparation		8:00 p.m.	5:30 a.m.	8:00 p.m.
And storm		Deployment	First storm	Full
Tracking			Events	Restoration

24. The Town manager validates and documents adherences and departures from its storm preparation plan. We modified our storm preparation plan to include a new technology-robot calling our customers with storm related information.
25. The Town manager validates and documents adherences and departures from its storm restoration plan. No modifications were made to the storm restoration plan.
26. The county Havana Electric reports in is Gadsden County.
27. Hermine effected our area:

Weather Impact				
County	Maximum Sustained Winds (MPH)	Maximum Gusts (MPH)	Maximum Rainfall (inches)	Maximum Storm Surge (Feet)
Gadsden	50-60	64	4	N/A

Irma Effected our area:

Weather Impact				
County	Maximum Sustained Winds (MPH)	Maximum Gusts (MPH)	Maximum Rainfall (inches)	Maximum Storm Surge (Feet)
Gadsden	40-50	55	2	N/A

28. See attached map.

29. The following are our hardened facilities statistics:

Hardened Facilities		
Hurricane Hermine	Number of Facilities Requiring	
	Repair	Replacement
<i>Transmission</i>		
Structures		
Substations		
Total		
<i>Distribution</i>		
Poles		3
Substation		
Feeder OH		
Feeder UG		
Feeder Combined		
Lateral OH	3	
Lateral UG		
Lateral Combined		
Total	3	3
<i>Service</i>		
Service OH	3	
Service UG		
Service Combined		
Total	3	

Hardened Facilities		
Hurricane Irma	Number of Facilities Requiring	
	Repair	Replacement
<i>Transmission</i>		
Structures		
Substations		
Total		
<i>Distribution</i>		
Poles		1
Substation		
Feeder OH		
Feeder UG		
Feeder Combined		
Lateral OH	5	
Lateral UG		
Lateral Combined		
Total	5	1
<i>Service</i>		
Service OH	3	
Service UG		
Service Combined		
Total	3	

30. The following are our non-hardened facilities statistics:

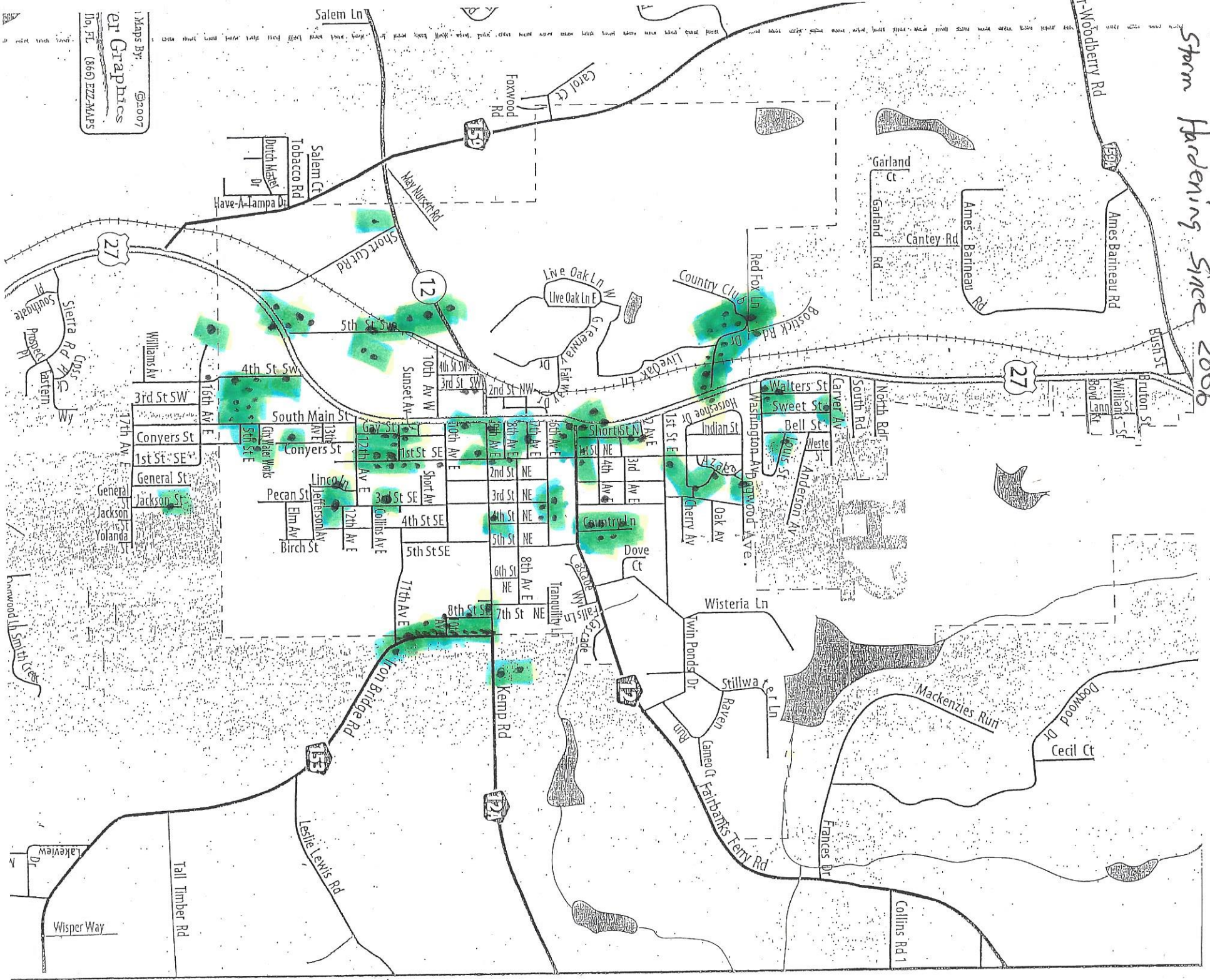
Non-Hardened Facilities		
Hurricane Hermine	Number of Facilities Requiring	
	Repair	Replacement
<i>Transmission</i>		
Structures		
Substations		
Total		
<i>Distribution</i>		
Poles		
Substation		
Feeder OH	3	
Feeder UG		
Feeder Combined		
Lateral OH	12	
Lateral UG		
Lateral Combined		
Total	15	
<i>Service</i>		
Service OH	7	
Service UG		
Service Combined		
Total	7	

Non-Hardened Facilities		
Hurricane Irma	Number of Facilities Requiring	
	Repair	Replacement
<i>Transmission</i>		
Structures		
Substations		
Total		
<i>Distribution</i>		
Poles		
Substation		
Feeder OH	2	
Feeder UG		
Feeder Combined		
Lateral OH	12	
Lateral UG		
Lateral Combined		
Total	14	
<i>Service</i>		
Service OH	7	
Service UG		
Service Combined		
Total	7	

31. For Hermine the causes of our outages were falling trees and limbs. For Irma the causes of our outages were falling trees and limbs and a broken pole.
32. Trees and limbs falling was the reason for our Hermine outages. Trees and limbs falling followed by a broken pole were the reasons for our Irma outages.
33. Havana has no flood monitors. We didn't experience any flooding damage.
34. Havana has no automated feeder switches.
35. The only critical infrastructure to lose power during any of these storm events was a major employer located in Gadsden County. The restoration time was 2 hours and the cause was a tree falling. A feeder OH needed repairing. This was during Irma.
36. During Hermine and Irma our underground facilities experienced no outages.
37. The Town will pay a contractor creating a new subdivision \$500.00 per connection to underground the electrical distribution.

TOWN OF HAVANA MAP

28
Storm Hardening Since 2006



Maps By: @2007
er Graphics
110, FL (866) 222-MAPS