December 27, 2017

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

Staging for Utility Personnel and Mutual Aid

1) The City of Moore Haven had no pre-storm meetings for Hurricanes Hermine, Maria or Nate, Hurricanes Matthew and Irma are as follows:

   a. **Hurricane Matthew** – Once the storm was named on September 29, 2016 the City of Moore Haven started their internal preparations on October 3, 2016, which consists of checking equipment and taking inventory of supplies that may be needed.

   **Hurricane Irma** – The same process was used for Irma, the storm was named roughly around August 31, 2017. City staff started their internal preparations on September 5, 2017.

   b. **Hurricane Matthew** – The City Council met on October 4, 2016 with instructions to watch the storm and make preparations where needed.

   **Hurricane Irma** – The City Council met on September 5, 2017 with instructions to be prepared.

   c. **Hurricane Matthew** – Mutual Aid was first discussed on October 6, 2016, with Barry Moline of Florida Municipal Electric Association, via email. I informed Mr. Moline if the City was impacted we would require assistance in the utility restoration and possibly debris removal.

   **Hurricane Irma** – Mutual Aid was first discussed On September 5, 2017, with Amy Zubaly of Florida Municipal Electric Association, via email. I informed Ms. Zubaly if the City was directly impacted, we would require assistance in the utility restoration and possibly debris removal.

2) The City of Moore Haven has two electric utility personnel. Their responsibilities prior to a storm are to assess the distribution system, look for weak places that may be more affected. After the storm passes, they’re responsible for damage assessments and reporting the damages and needs of the electric system to the Public Works Director.

3) No mutual aid costs were accrued for Hurricanes Hermine, Matthew, Maria or Nicole. Mutual aid costs for Hurricane Irma first began to accrue on September 12, 2017.
Damage Assessment Process

4) The City’s damage assessment begins as soon as it is safe to travel the streets and easements after a storm. After Hurricane Irma, the two-man electric crew rode each street and easement noting where damage had occurred. Mutual aid crews did not show up until two days after the storm passed through and our damage assessment was completed with a restoration plan already in progress when they arrived.

5) Damage assessment data is updated verbally, via telephone or face to face, from the electric lead lineman to the Public Works Director.

Restoration Workload

6) As previously stated, the City had to wait for mutual aid crews to arrive from out of state. The City’s two-man crew, immediately started work on the restorations they could perform on their own. We try to accommodate schools and businesses first. Then, the distribution lines that will service the most customers is next to be restored.

7) 

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<thead>
<tr>
<th>Personnel Responsible for Restoration Workload Assignments</th>
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<td>Public Works Director</td>
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8) Restoration workloads adjust as utilities are restored. The City’s distribution system is one square mile. We split the City into 4 quadrants. After Hurricane Irma, the City received 5 crews through mutual aid. We were able to make 3 crews to work consecutively in different quadrants to restore power more quickly. As utilities were restored, crews were rotated to other damaged areas.

9) No mutual aid was required for Hermine, Matthew, Maria, or Nate. During Hurricane Irma, once our utility system was 100% restored, we released the mutual aid crews.

Staffing Considerations

10) The following pertains to Hurricane Irma only:

   a. Lodging was provided for 0 Utility personnel.
   b. Mutual Aid lodging was provided for 10 men for 5 days
   c. 2 meals a day were provided to Utility personnel
   d. 2 meals a day were provided to mutual aid partners
   e. There were 0 reported Utility personnel injuries
f. There were 0 reported mutual aid partner injuries

g. There were 0 Utility personnel fatalities

h. There were 0 mutual aid partner fatalities

There were no delays in restoration associated with any of the above.

11) The City of Moore Haven distribution system was 100% restored from Hurricane Irma on September 16, 2017.

Customer Communication

12) Hurricane Irma

   a. approximately 910 customers
   b. entire system down, all customers out

13) The City of Moore Haven’s call center was used after hours and during any closures before Hurricane Irma came through. After the storm, the call center was without power for two days, so no calls could be answered. Once power was restored, call center was used as normal to answer questions.

14) During Hurricane Irma, the City’s call center had one person on call at all times. There are four employees that rotate at that position weekly.

   a. No additional personnel were brought in; however, we did use Glades County EOC to help get out important messages.

15) The City’s call center received 61 phone calls pertaining to Hurricane Irma.

16) The City of Moore Haven does not have a data base of customer contact telephone numbers. The contact information is used for billing purposes only.

17) Not applicable to the City of Moore Have

18) The call center personnel kept a log of calls. All calls are handled based on the call, whether it is an outage or other City issue.

19) During Hurricane Irma, the Public Works Director was the call center personnel, therefore, outage information was given directly to the customer when they called.

   a. Routine updates would have been given if the call center personnel were different.

20) The restoration process is relayed from Lead Lineman to the Public Works Director. There is no call system for customers. As the customer calls in, the information is relayed. The lead lineman estimates how long the restoration will
take and routinely updates the Public Works Director or the restorations. Restoration information was relayed to County and State officials via cellular phone, text, and email; whichever facility was most easily available.

Material Considerations

21) The City of Moore Haven has two fuel stations in the City. One of the stations, reserved fuel for City, County, and emergency personnel.
   a. The City does not store fuel of any kind.
   b. Fuel shortage was not an issue for City personnel or mutual aid partners
   c. There were no delays due to fuel shortages.
   d. Mutual aid partners came with equipment, therefore there were no shortages of vehicles

22) The only delay the City of Moore Haven had after Hurricane Irma, was the arrival of mutual aid partners. The storm impacted much of the State, making interstate travel tedious. Our mutual aid partners came from Iowa and drove for three days to get here.

Restoration Process

23) Hurricane Irma: Staging with City Utility personnel started on September 9, 2017. Personnel was first deployed for damage assessment on September 11, 2017. Mutual aid personnel arrived on September 13, 2017 and was released on September 17, 2017. Last customer able to receive power was restored on September 17, 2017.

24) The City’s storm preparation plan is to prepare as best we can by meeting in advance to discuss building prep, parks prep, normal operation activity, material needs and mutual aid needs. The City does not validate adherences or departures from it storm preparation plan.

25) The City’s storm restoration plan starts prior to landfall of the storm, to determine is mutual aid will be required. If no mutual aid is required, we assess damages and proceed with a work plan based on the damages.

26) City of Moore Haven only services electric customers within the incorporated city limits.

27) Not available for City of Moore Haven

28) Not applicable to the City of Moore Haven
29) Hardened Facilities:

30) Non-Hardened Facilities: 11 broken utility distribution poles were replaced; 7 – 40’ wooden poles, 2 – 35’ wooden poles and 2 – 30’ wooden poles.

31) The highest outage causation from Hurricane Irma was overhead automated feeder switch was disengaged by wheeling agency, highly sustained winds and broken utility poles.

32) The biggest issue was waiting for the wheeling agency to restore power to the City so that we could then restore to our customers.

33) No damage restoration was prevented due to flooding from Hurricane Irma.

34) The City of Moore Haven purchases power from Florida Power and Light, which is wheeled through Glades Electric Cooperative. Glades Electric has an automated feeder switch that controls the overhead distribution to the City. When winds became too high, the switch was disengaged.

Critical Infrastructure Restoration

35) The City of Moore Haven has not critical infrastructure facilities on its electric utility system.

Underground Facilities

36) The City sustained no underground failures during Hurricane Irma. No repairs or replacements were performed.

37) The City currently has no programs or tariffss in place now to promote undergrounding of new construction or conversion of overhead to underground.

Thank you,

Jerri Lynn Schlueter
Public Works Director