



PO Box 301 | Sumterville, Florida 33585-0301 | 352.793.3801

March 29, 2018

State of Florida, Public Service Commission  
Capital Circle Office Center  
2540 Shumard Oak Boulevard  
Tallahassee, Florida 32399-0850

Uploaded to:

<https://secure.floridapsc.com/ClerkOffice/EfilingPublic>

Re: SECO Energy Response – HURRICANE IRMA  
Docket No. 20170215-EU - Review of electric utility hurricane preparedness  
and restoration actions

The attached report details SECO Energy's preparation and restoration activities following Hurricane Irma (9/9/17 - 9/25/17).

If you have questions or require further clarification on any of the responses in the report, please contact Jennifer Story (352-569-9641) or Tracey Scotto (352-569-9858).

Thank you,

A handwritten signature in black ink that reads "Jennifer Story".

Jennifer Story, System Planning Supervisor

A handwritten signature in black ink that reads "Tracey C. Scotto".

Tracey Scotto, Reliability Analyst

XC: James P. Duncan, SECO Energy  
John L. LaSelva, SECO Energy  
R. Ben Brickhouse, SECO Energy  
Michel L. Bjorklund, FECA  
Michelle L. Hershel, FECA

## 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.

### **SECO Response (Irma)**

#### **Meeting Agenda #1**

**Hurricane Irma: 9/6/17 2:30pm**

**Pre-emergency meeting checklist:**

#### **Weather Update:**

#### **Vacations / Personnel:**

#### **Work Schedule:**

#### **Restoration (follow the plan):**

- Expected to be Level 4
- Projected restoration duration
- Work packets
- Feeder priority list (hospitals, shelters, public safety, member counts, etc.)
- Outside resources - contacted all contractors
- SECO T&D
- Fleet / Warehouse
- Pike
- Ivy Smith
- System Operations
- IT
- Call Center
- Vegetation Management / Reliability
- HR & Support
- A&F / R&D / Billed / etc.
- Communications
- Engineering:
  - GIS Support
  - Contract Support
  - SCADA Support
- Follow the plan

#### **Logistics:**

- Crane
- Front-end loaders
- Troll motors
- Water support/air boat
- Fuel
- Storm kits

- Caterer
- Pcards
- A/C
- Hotels
- Buses
- Satellite phone
- Multi-purpose rooms

**Thursday decisions:**

- Secure facilities
- Early morning staffing
- Security needs
- EOC monitoring
- Reimbursement tracking

**Open Discussion:**

**Meeting Agenda #2**

**Hurricane Irma: 9/8/17 11:00am**

**Emergency Meeting:**

**Weather Update:**

**Miscellaneous:**

- Not a PowerOn storm
- Command Center Emergency #'s
- Command Center – opens Saturday, 7:30am
- Feeder priority list
- Follow the plan
- Storm riders

**Resources:**

- Line
- Trees
- New resources needed

**Vacations / Personnel:**

- Employee notification
- Vacations – all cancelled
- Alert status – 4pm, 9/8/17
- Schedules
- Fleet / Warehouse
- B&G:
  - Secure all buildings
  - Disable gates that require power
  - Generator fuel
  - Multi-purpose rooms

- EOC Staffing

**Logistics:**

- Food / hotel plans / buses
- Security update

**Communications:**

- Member expectations

**Final thoughts:**

- Follow the plan
- Do not deviate from the plan
- One pole at a time; one day at a time
- Be safe, no risks, you are important

**EOCs:**

- Sumter County
- Lake County
- Marion County
- Citrus County

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

**SECO Response (Irma)**

- Conference call between Managers and FECA: daily conference calls from 9/6/17 to 9/15/17
- Conference call between FECA and other Statewides to discuss mutual aid: daily conference calls from 9/6/17 to 9/15/17
- SECO began requesting restoration assistance on 9/7/17 and continued through 9/14/17. The following foreign crews assisted SECO with restoration:
  - Bird Electric (overhead line)
  - Henkels & McCoy (overhead line)
  - Hi-Tech (overhead line)
  - Sparks (overhead line)
  - PAR Quanta (overhead line)
  - T&D Solutions (overhead line)
  - SE Power (overhead line)
  - Missouri Statewide (overhead line)
  - Louisiana Statewide (overhead line)
  - Indiana Statewide (overhead line)
  - Wood County Texas (overhead line)
  - Comanche Texas (overhead line)
  - Talquin Electric Cooperative, Florida (overhead line)
  - Energy Group (tree removal)
  - WA Kendall (tree removal)

- Wolf Tree (tree removal)
- Nelson Tree Service (tree removal)

c. Date mutual aid was requested and nature of request.

**SECO Response (Irma)**

Thursday, September 7, 2017 through Thursday, September 14, 2017 via phone conference and receipt/approval of crew and equipment rosters.

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.

**SECO Response (Irma)**

(next 4 pages)

| <b>Storm Function</b>  | <b>Description</b>  | <b>Personnel Assigned</b> |
|--|---|---------------------------|
| Communications   | Handles all contact with the media. Provides information to the Emergency Operations Center (EOC). Determines methods to update employees on status of damage and restoration efforts, including time frames, methods and responsibilities. Coordinates phone answering strategies for headquarters, division offices and scheduling. Provides a consistent means to keep large power consumers apprised as to damage and restoration efforts. Coordinates and communicates fuel requirements for SECO generators and consumers' generators. Defines means for acquisition of cellular phones, checking radio systems prior to storm, contingency plans for lost microwave systems. Develops methods to check reports from police and EOC's in coordination with other damage assessments.  | 73                        |
| Emergency Restoration Command/Management Team and Lead Coordinator | Determines need for outside crew assistance, contacts, tracking, arrival times and manpower requirements. Determines the means to provide food for inside and field employees, delivery schedules, contingencies for long term/wide spread outages, etc. Establishes the means and alternatives to acquire lodging for both foreign assistance and SECO personnel, if necessary. Details means to secure transportation for foreign personnel, including busing to and from staging areas to housing and meal areas, if necessary. Ensures adequate funds available. Obtains names of all SECO personnel in the field, their location and means of communication. Ensures that all employees needed for emergency restoration have a point of contact for storm issues that occur on their personal property and that emergency repairs can be coordinated for their families. Provides security for Corporate Headquarters, Division | 6                         |

|                       |  |     |
|-----------------------|--|-----|
|                       | <p>offices and staging areas. Secures sites for staging crews and materials. Details methods of acquiring materials, sources, delivery, accounting and tracking. Defines staffing of System Control Command Center, hours of operation, training requirements, communications system support and location of operation. Develops a methodology for restoring electrical service following storms or other emergencies. Determines overall damage. Identifies and reports specific damage on main line feeders so that crews may be sent to make repairs and restore service. Restores power in the field after the storm/emergency passes. Provides a method to quantify damage in terms of man-hours, track outage status, predict restoration status, define and update priorities. Defines means to assign work, coordinate restoration efforts, switching, materials, and guides.</p>  |     |
| Employee Coordination | Organizes and tracks restoration work in the field after the storm/emergency passes.   | 10  |
| Facilities Management | <p>Defines means for acquisition of cellular phones, checking radio systems prior to storm, contingency plans for lost microwave systems. Handles storm contract acquisition and supply chain services. Determines need for outside crew assistance, contacts, tracking, arrival times and manpower requirements. Completes building preparation prior to storm. Conducts preliminary inspection for damage after storm. Coordinates all fuel requirements, including tankers, gas credit cards or open accounts, hours of service, etc. as well as fuel requirements for SECO generators and consumers' generators. Defines means to assign work, coordinate restoration efforts, switching, materials, and guides. Coordinates housing of foreign crews. Defines staffing of System Control Command Center, hours of operation, training requirements, communications system support and location of operation. Establishes means and alternatives to acquire lodging for both foreign assistance and SECO personnel, if necessary. Details means to secure transportation for foreign personnel, including busing to and from staging areas to housing, and meal areas, if necessary. Details methods of acquiring materials, sources, delivery, accounting and tracking. Determines the means to provide food for inside and field employees, delivery schedules, contingency for long term/wide spread outages, etc. Develops methods to check reports from police and EOC's are checked in coordination with other damage assessments. Handles coordination of laundry services. Coordinates phone answering strategies for headquarters and division offices and scheduling. Obtains names of all SECO personnel in the field and their location and means of communication. Provides a consistent means to keep large power consumers apprised as to damage and restoration efforts. Provides security for Corporate Headquarters, Division offices and staging areas. Secures sites for staging crews and materials. Provides a method to</p> | 125 |

|                  |   |     |
|------------------|---|-----|
|                  | quantify damage in terms of man-hours, track outage status, predict restoration status, define and update priorities. Ensures that all employees needed for emergency restoration have a point of contact for storm issues that occur on their personal property and that emergency repairs can be coordinated for their families. Identifies and reports specific damage on main line feeders so that crews may be sent to make repairs and restore service. Ensures adequate funds available. Restores power in the field after the storm/emergency passes. Tracks all costs of storm restoration for FEMA.   |     |
| Fleet Management | Completes building preparation prior to storm. Conducts preliminary inspection for damage after storm. Details methods of acquiring materials, sources, delivery, accounting and tracking. Determines criteria for SECO repairs versus outside repairs, establishes approved vendors, contacts and phone numbers. Provides for the acquisition of both small and large tools, rental of special heavy equipment, contacts, payment arrangements and availability. Ensures that all employees needed for emergency restoration have a point of contact for storm issues that occur on their personal property and that emergency repairs can be coordinated for their families. Ensures adequate funds available.  | 10  |
| Restoration      | Handles storm contract acquisition and supply chain services. Determines need for outside crew assistance, contacts, tracking, arrival times and manpower requirements. Completes building preparation prior to storm. Conducts preliminary inspection for damage after storm. Coordinates all fuel requirements, including tankers, gas credit cards or open accounts, hours of service, etc. as well as fuel requirements for SECO generators and consumers' generators. Defines means to assign work, coordinate restoration efforts, switching, materials, and guides. Coordinates housing of foreign crews. Defines staffing of System Control Command Center, hours of operation, training requirements, communications system support and location of operation. Establishes the means and alternatives to acquire lodging for both foreign assistance and SECO personnel, if necessary. Details means to secure transportation for foreign personnel, including busing to and from staging areas to housing and meal areas, if necessary. Details methods of acquiring materials, sources, delivery, accounting and tracking. Determines the means to provide food for inside and field employees, delivery schedules, contingencies for long term/wide spread outages, etc. Develops methods to check reports from police and EOC's in coordination with other damage assessments. Obtains names of all SECO personnel in the field and their location and means of communication. Provides security for Corporate Headquarters, Division offices and staging areas. Secures sites for staging crews and materials. Provides a method to quantify damage in terms of man-hours, track outage status, predict restoration status, define and update | 148 |

|                      |   |            |
|----------------------|---|------------|
|                      | priorities. Ensures that all employees needed for emergency restoration have a point of contact for storm issues that occur on their personal property and that emergency repairs can be coordinated for their families. Identifies and reports specific damage on main line feeders so that crews may be sent to make repairs and restore service. Determines overall damage. Develops a methodology for restoring electrical service following storms or other emergencies. Ensures adequate funds available. Restores power in the field after the storm/emergency passes.   |            |
| Security             | Provides security for Corporate Headquarters, Division offices and staging areas. Secures sites for staging crews and materials.  | 1          |
| Warehouse & Material | Handles storm contract acquisition and supply chain services. Determines need for outside crew assistance, contacts, tracking, arrival times, and manpower requirements. Provides water and ice for food storage, drinking and hygiene. Coordinates all fuel requirements, including tankers, gas credit cards or open accounts, hours of service, etc. as well as fuel requirements for SECO generators and consumers' generators. Details means to secure transportation for foreign personnel, including busing to and from staging areas to housing, and meal areas, if necessary. Details methods of acquiring materials, sources, delivery, accounting and tracking. Provides security for Corporate Headquarters, Division offices and staging areas. Secures sites for staging crews and materials. Provides for the acquisition of both small and large tools, rental of special heavy equipment, contacts, payment arrangements and availability. | 25         |
| <b>Grand Total</b>   |   | <b>398</b> |

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

**SECO Response (Irma)**

Costs for Hurricane Irma began to accrue for receiving mutual aid on Thursday, September 7, 2017.

**Damage Assessment Process**

- 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.



## **SECO Response (Irma)**

The initial damage assessment process for Hurricane Irma was handled by SECO Energy field personnel who inspected each feeder from the substation to the end of the line. Damage assessment data was then updated and communicated internally through SECO Energy's PowerOn outage management system. Outage information was dispatched to SECO's first responders who were utilized to investigate, repair and restore power. If the first responder was unable to restore power themselves, the outage information, including materials required, was referred to a crew to repair. The crew supervisors directed the crews where to restore to get the most number of customers back on in the shortest amount of time. The distribution superintendents were responsible for maintaining communication between their area, their assigned crews, and the Command Center. Twice a day a report was given to the Command Center as to which areas had been restored and which areas were still requiring restoration in a prioritized manner.

The total number of SECO Energy employees involved in the initial damage assessment and storm restoration for Hurricane Irma were as follows: 70 Transmission and Distribution Line Technicians, 17 Managers/Supervisors, 52 Engineering/Operations employees available to serve as guides, 10 employees providing clerical support, and 11 System Control coordinators gathering and disseminating all of the damage information through SECO Energy's PowerOn outage management system. A total of 8 contract personnel were also available to serve as guides and 956 contract line and tree crew personnel were on-site and available to assist with storm restoration.

(pictures – pages 10 to 22)



















**SECO**Energy.com

Our purpose is to provide exceptional service to our customers, co-workers and communities.











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

**SECO Response (Irma)**

Initially, damage assessment data for Hurricane Irma was communicated internally by SECO Energy field personnel who inspected each feeder from the substation to the end of the line. Twice a day a report was given to the Command Center as to which areas had been restored and which areas were still requiring restoration in a prioritized manner. Damage assessment data was then updated and communicated internally through SECO Energy's PowerOn outage management system.

**Restoration Workload**

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

**SECO Response (Irma)**

SECO Energy determines when to start restoration efforts based on when it is safe and sustained winds subside below 35-mph. SECO Energy's restoration efforts start with transmission outages, followed by substation outages, and then feeder outages. Feeders with hospitals, shelters, schools, and government agencies are the highest priority. During Hurricane Irma, certain gas stations and assisted living facilities were added to the highest priority list by Governor Scott and SECO Energy complied. Large commercial accounts come next so that the public has access to food, water, and supplies. The feeders with the greatest number of member accounts on them are the next priority. This process provides the quickest relief to the most people. Feeders with smaller member numbers are next, followed by members on laterals. Individual home outages are necessarily last on the list.

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

**SECO Response (Irma)**

| Personnel Responsible for Irma Restoration Workload Assignments |                     |                         |
|---|---------------------|-------------------------|
| Title   | Years of Experience | Number of Crews Managed |
| Superintendent - Eustis   | 37                  | 63                      |
| Superintendent - Groveland                                      | 28                  | 30                      |
| Superintendent - Ocala  | 28                  | 87                      |
| Superintendent - Sumterville                                    | 35                  | 108                     |

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

### **SECO Response (Irma)**

Following the initial survey, SECO Energy's Lead Coordinators decide the crew assignments for the initial restoration effort following the procedures outlined in #6. Twice daily, Distribution Superintendents provide a report to the SECO Command Center/Lead Coordinators of areas restored and areas to be restored in a prioritized manner.

Distribution Superintendents formulate and propose a plan for continued restoration by addressing the following:

- Evaluate emergency situations and plan an appropriate response
- Determine number of crews, make up, and type of equipment needed
- Determine use of existing contract line crews, if assistance is needed
- Determine use of existing contract right-of-way crews, if assistance is needed
- Review crew assignments, working hours, meal times, etc.

Once field restoration begins, the Distribution Superintendents:

- Monitor personnel
- Monitor meal times
- Monitor hours worked and time to be released for rest period and time to report back for work assignments
- Keep personnel informed on the following:
  - Advisories
  - Alerts
  - Special assistance
  - Changes to work schedules
  - Safety and security messages

The Lead Coordinator makes the final decision concerning work hours and crew movements for restoration.

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

### **SECO Response (Irma)**

SECO Energy was considered fully restored from Hurricane Irma when the final interrupted service was re-energized on September 26, 2017 at 1:38 PM. The release of all foreign crews occurred on September 17, 2017 at 10:00pm.



**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)
  - b. Days of lodging provided for mutual aid partners (Person-Days)
  - c. Number of meals provided for Utility personnel
  - d. Number of meals provided for mutual aid partners
  - e. Number of Utility personnel injuries
  - f. Number of mutual aid partner injuries
  - g. Number of Utility personnel fatalities
  - h. Number of mutual aid partner fatalities

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

**SECO Response (Irma)**

|   |  |
|---|--|
| a | Lodging – 0 person-days for cooperative employees  |
| b | 6,752 person-days for mutual aid partners  |
| c | Meals – 21,621 total meals served (cooperative & mutual aid)   |
| d | See (c) above  |
| e | Cooperative employee injuries – (2) <ul style="list-style-type: none"> <li>• Severely twisted knee; jumped over fence to escape dog attack</li> <li>• Vehicle accident; employee was rear ended by a distracted driver, no major injuries</li> </ul> |
| f | Mutual aid partner injuries – (1); tree limb fell on tree-trimming contractor  |
| g | Cooperative fatalities - 0   |
| h | Mutual aid fatalities – 0  |
|   | <b>Please see logistical hurdles listed on page 35</b>   |

11. Please provide a detailed description of when your Utility was considered fully restored from each named storm event.

**SECO Response (Irma)**

SECO Energy was considered fully restored from Hurricane Irma when the final interrupted service was re-energized on September 26, 2017 at 1:38 PM.

**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
  - b. Peak number of outages

**SECO Response (Irma)**

| <b>County</b> | <b>Total number of customer accounts</b> | <b>Peak number of outages Hurricane Irma</b> |
|---------------|--|--|
| Citrus        | 15,268                                   | 159  |
| Hernando      | 184                                      | 7  |
| Lake          | 63,429                                   | 823  |
| Levy          | 1,602                                    | 42   |
| Marion        | 56,862                                   | 742  |
| Pasco         | 36                                       | 0  |
| Sumter        | 60,627                                   | 477  |
| <b>Total</b>  | <b>198,008</b>                           | <b>2,250</b>                                 |

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

**SECO Response (Irma)**

SECO Energy’s call center answered phone calls regarding member outages and inquiries on Saturday, September 9, 2017 through Sunday, September 17, 2017 in response to Hurricane Irma.

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?

**SECO Response (Irma)**

SECO Energy had a total of 53 Member Support Associates working during Hurricane Irma. There were seven (7) SECO Energy Corporate Communications employees addressing customer contacts via multiple social media networks and platforms during Hurricane Irma. Additionally, SECO Energy had 14 Energy Services employees working directly with Emergency Operations Centers to assist with customer contacts during Hurricane Irma.

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

**SECO Response (Irma)**

(next page)

SECO Energy's call center received 27,333 phone calls and handled 71% (19,333). The call center also responded to 1,780 emails during Hurricane Irma.

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.

### **SECO Response (Irma)**

During major storms, SECO Energy communicates with members through media releases, in-person contacts, phone calls, emails, the secoenergy.com website, a proactive, interactive restoration plan map, social media (via Facebook & Twitter) and Emergency Operation Centers (EOC) where SECO staffs personnel on a 24/7 basis when fully activated. SECO Energy's Corporate Communications team also communicates daily with state and federal legislators about storm preparation and restoration status.

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.
  - a. 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.

### **SECO Response (Irma)**

SECO Energy's customer service team answers member questions and, if necessary, creates outage tickets using SECO's PowerOn outage management system.

SECO Energy experienced delays in receiving and responding to member contacts due to the following:

- CenturyLink – outages during and after Hurricane Irma
- Verizon – sporadic service throughout storm restoration with a complete outage on Wednesday, September 13, 2017, due to a communication generator running out of fuel

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?

### **SECO Response (Irma)**

During Hurricane Irma restoration, member contacts related to outages were entered into SECO Energy's PowerOn outage management system.

Outage ticket call type options are: Power Out, Partial Power Out, Voltage or Flicker Problems, Wire Down – House Fire – Emergency and Pole, Cabinet or other Facility. Additional comments fields are also utilized, as needed.

19. Please provide a detailed description of how customer service representatives are informed of restoration progress.
- 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? *N/A*

### **SECO Response (Irma)**

Employee communications and status updates on restoration progress are communicated to all SECO Energy employees twice daily.

SECO Energy employees can also access SECO Energy’s website and social media pages for other news releases and updates that are posted throughout the restoration process.

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.

### **SECO Response (Irma)**

SECO Energy communicates with members through media releases, in-person contacts, phone calls, emails, the secoenergy.com website, a proactive, interactive restoration plan map, social media (via Facebook & Twitter) and Emergency Operation Centers (EOC) where SECO staffs personnel on a 24/7 basis when fully activated.

Before, during and after the storm, SECO Energy published daily news releases, updated the secoenergy.com website and reached nearly half a million on Facebook with 86 status updates and thousands of private messages. SECO also published an interactive restoration plan map daily that allowed members to input their address to see if their home was in the scheduled work area that day.

### **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

**SECO Response (Irma)**

|   |   |
|---|---|
| a | SECO has fueling pumps at each district office for on-site fueling. However, SECO’s mobile fueling contractor took equipment out of state and failed to make deliveries during Hurricane Irma restorations. The State provided several options for free fueling in Ocala & Lake County. SECO’s power provider, Seminole, also provided fuel through a Central Missouri Cooperative fueling truck. |
| b | SECO experienced fuel shortages during Hurricane Irma.  |
| c | SECO experienced delays due to fuel shortages during Hurricane Irma.  |
| d | SECO had enough fleet vehicles available for restoration and did not experience any issues mobilizing crews during Hurricane Irma.  |

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

**SECO Response (Irma)**

SECO did not experience any delays in restoration due to a shortage of materials, however fuel issues did delay delivery of materials during Hurricane Irma.

**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.

**SECO Response (Irma)**

**SECO Energy’s Restoration Process Summary Timeline for Hurricane Irma**

| Date     | Time  | Summary Timeline   |
|----------|-------|--|
| 09/04/17 | 17:00 | Governor declared State of Emergency                             |
| 09/06/17 | 14:30 | SECO Energy Pre-Emergency Meeting                                |
| 09/06/17 | 16:00 | SECO Energy entered Pre-Alert Status                             |
| 09/07/17 | 09:00 | Mutual Aid - local subcontractor and foreign assistance acquired |
| 09/08/17 | 15:00 | Arrival and staging of foreign crews began                       |
| 09/08/17 | 16:00 | SECO Energy entered Full-Alert Status                            |

|          |       |  |
|----------|-------|--|
| 09/08/17 | 17:00 | Hurricane Watch issued                               |
| 09/09/17 | 06:00 | Hurricane Warning issued                             |
| 09/10/17 | 15:00 | Stand-down   |
| 09/10/17 | 21:00 | Peak outages occurred                                |
| 09/11/17 | 06:00 | Hurricane eye passed directly over SECO headquarters |
| 09/11/17 | 12:00 | Allocation and Deployment of all crews               |
| 09/17/17 | 21:00 | Release of Mutual Aid                                |
| 09/17/17 | 22:00 | Power essentially restored (96% of outages)          |
| 09/26/17 | 14:00 | Last outage restored                                 |

24. Please explain how the Utility validates adherences and departures from its storm preparation plan.
- 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.

**SECO Response (Irma) – please see #25**

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

**SECO Response (Irma)**

SECO Energy’s Emergency Preparedness Plan (EPP) provides a method for SECO employees to prepare and respond to emergencies. SECO Energy did not deviate from its emergency plan during Hurricane Irma restoration. However, as soon as practical following post-storm restoration activates, meetings are held to discuss lessons learned and recommendations for improvement. No major recommendations for improvement were identified following Hurricane Irma restoration.

**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.

**SECO Response (Irma)**

(next page)

The following counties were impacted due to Hurricane Irma: Citrus, Hernando, Lake, Levy, Marion, and Sumter.

- 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.

**SECO Response (Irma)**

SECO has no weather monitoring equipment installed.

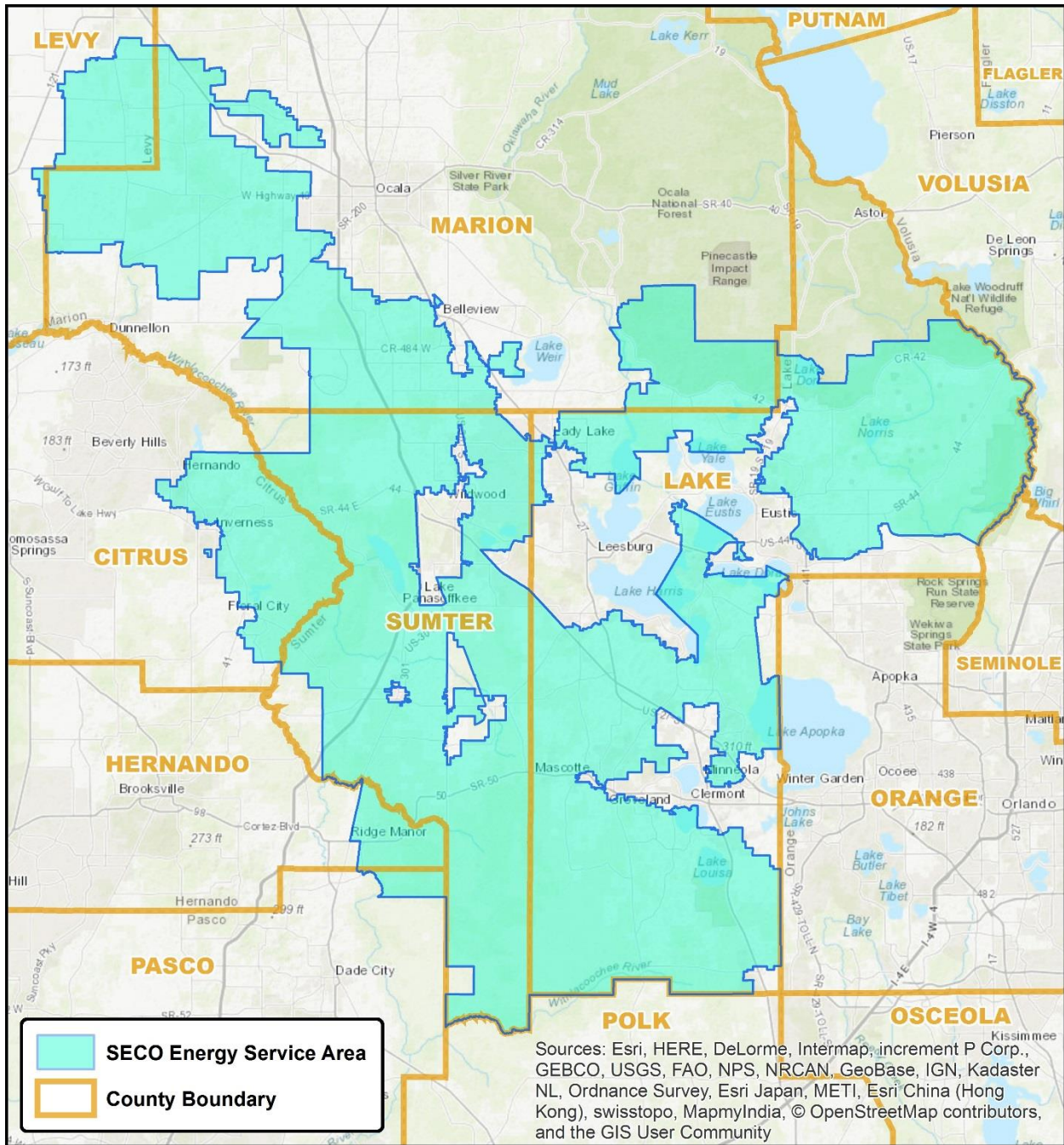
| Weather Impact - Irma |  |                     |                           |                            |
|-----------------------|--|---------------------|---------------------------|----------------------------|
| County                | Maximum Sustained Winds (MPH) – <i>ground winds measured at substation</i> | 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.

**SECO Response (Irma)**

(next page)





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.

**SECO Response (Irma)**

| <b>Hardened Facilities</b> |                                       |                    |
|----------------------------|---------------------------------------|--------------------|
| <b>Hurricane</b>           | <b>Number of Facilities Requiring</b> |                    |
|                            | <b>Repair</b>                         | <b>Replacement</b> |
| <b><i>Transmission</i></b> |                                       |                    |
| Structures                 | 9                                     | 0                  |
| Substations                | 0                                     | 0                  |
| <b>Total</b>               | <b>9</b>                              | <b>0</b>           |
| <b><i>Distribution</i></b> |                                       |                    |
| Poles                      | 0                                     | 352                |
| Substation                 | 1                                     | 0                  |
| Feeder OH                  | 64                                    | 0                  |
| Feeder UG                  | 2                                     | 0                  |
| Feeder Combined            | 66                                    | 0                  |
| Lateral OH                 | 1,049                                 | 0                  |
| Lateral UG                 | 82                                    | 0                  |
| Lateral Combined           | 1,131                                 | 0                  |
| <b>Total</b>               | <b>1,198</b>                          | <b>352</b>         |
| <b><i>Service</i></b>      |                                       |                    |
| Service OH                 | 922                                   | 346                |
| Service UG                 | 82                                    | 0                  |
| Service Combined           | 1,004                                 | 346                |
| <b>Total</b>               | <b>2,211</b>                          | <b>698</b>         |

Note: Of the nine (9) transmission structures requiring repair, eight (8) were Duke Energy Florida bulk transmission structures and one (1) was a City of Ocala transmission structure, "not" SECO Energy transmission structures.

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.

**SECO Response (Irma)**

(next page)

| <b>Non-Hardened Facilities</b> |                                       |                    |
|--------------------------------|---------------------------------------|--------------------|
| <b>Hurricane</b>               | <b>Number of Facilities Requiring</b> |                    |
|                                | <b>Repair</b>                         | <b>Replacement</b> |
| <b><i>Transmission</i></b>     | 0                                     | 0                  |
| Structures                     | 0                                     | 0                  |
| Substations                    | 0                                     | 0                  |
| <b>Total</b>                   | <b>0</b>                              | <b>0</b>           |
| <b><i>Distribution</i></b>     |                                       |                    |
| Poles                          | 0                                     | 0                  |
| Substation                     | 0                                     | 0                  |
| Feeder OH                      | 0                                     | 0                  |
| Feeder UG                      | 0                                     | 0                  |
| Feeder Combined                | 0                                     | 0                  |
| Lateral OH                     | 0                                     | 0                  |
| Lateral UG                     | 0                                     | 0                  |
| Lateral Combined               | 0                                     | 0                  |
| <b>Total</b>                   | <b>0</b>                              | <b>0</b>           |
| <b><i>Service</i></b>          |                                       |                    |
| Service OH                     | 0                                     | 0                  |
| Service UG                     | 0                                     | 0                  |
| Service Combined               | 0                                     | 0                  |
| <b>Total</b>                   | <b>0</b>                              | <b>0</b>           |

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.

**SECO Response (Irma)**

The five highest volume outage causes that impacted SECO Energy's service area during Hurricane Irma were as follows:

- 1) Unknown
- 2) Vegetation
- 3) Equipment failure
- 4) Overhead conductor
- 5) Broken pole

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

## **SECO Response (Irma)**

The top five drivers that protracted service restoration time during Hurricane Irma were as follows:

- 1) Sustained winds above 35-mph (for approximately 21 hours)
- 2) Toppled trees
- 3) Downed power lines
- 4) Broken poles
- 5) Debris blocking roadways

Additional logistical hurdles that protracted service restoration time during Hurricane Irma were:

- The "unknown" track of Irma prevented utilities east of the Mississippi River from releasing crews to Florida, creating competition among all Florida electric utilities for out-of-town assistance.
- A massive number of evacuees caused fuel shortages across the entire state, traffic gridlock, hotel space shortages, as well as bottled water, ice, and food supply shortages.
- SECO's mobile fueling contractor took their equipment out of state for protection.
- SECO's telephone provider, Century Link, experienced widespread outages that caused SECO Energy phone lines to be inoperable for members calling inbound as well as outbound calls September 11-13.
- SECO's Eustis Operating Center lost power and phone use due to generator failure September 11-13.
- SECO's online Storm Center platform received more than one (1) million hits on September 11, contributing to skewed outage statistics from members reporting outages multiple times
- Mobile phone service via Verizon was inoperable and/or sporadic across SECO territory, making it almost impossible to communicate with outside resources September 13-14.
- Out of state contract crew arrivals were spread out over the restoration period; two modules were released due to performance and safety issues.
- SECO had to relocate 172 contractors mid-restoration to accommodate guests for a LPGA golf tournament and a Florida vs. Tennessee college football game.
- One hotel served by Duke Energy Florida that housed 120 contractors was without power and running water for three (3) days.
- Members who evacuated did not report their individual outage until many days into the restoration.
- Many areas were completely inaccessible by standard utility vehicles, thus requiring the use of track vehicles, front-end loaders, skid steers, jon boats and contracted pontoon boats in order to restore service.
- Employee exhaustion was a factor, as employees worked extremely long hours and many did not have power and/or running water at home.

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

**SECO Response (Irma)**

Not applicable.

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.

**SECO Response (Irma)**

Two (2) outages were avoided on feeders with distribution automation equipment during Hurricane Irma. Data was collected through SECO's PowerOn outage management system and SCADA logs.

**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.

**SECO Response (Irma)**

(next 3 pages)

| Hurricane (Name) – CIF                    |                           |                               |                                   |                                |        |         |
|---|---------------------------|-------------------------------|-----------------------------------|--------------------------------|--------|---------|
| CIF Name/Type (i.e. Hospital)             | County/ Location          | Restoration Time              | Outage Cause                      | Number of Facilities Requiring |        |         |
|   |                           |                               |                                   |                                | Repair | Replace |
|   |                           |                               |                                   | <i>Transmission</i>            |        |         |
| Carlton Palms Educational Center          | Lake County/ Mount Dora   | 4,208 minutes                 | Supplier = Duke Energy            | Structures                     | 1      |         |
| Round Lake Elementary                     | Lake County/ Sorrento     | 6,799 minutes                 | Supplier = Duke Energy            | Structures                     | 1      |         |
| Sawgrass Bay Elementary*                  | Lake County/ Clermont     | 1,112 minutes                 | Supplier = Duke Energy            | Structures                     | 1      |         |
| Lake Weir Middle* and Villages Elementary | Marion County/ Lady Lake  | 3,595 minutes                 | Supplier = Duke Energy            | Structures                     | 1      |         |
| West Marion Community Hospital            | Marion County/ Timberwood | 778 minutes                   | Supplier = Duke Energy            | Structures                     | 1      |         |
| Westport High                             | Marion County/ Timberwood | 3,809 minutes                 | Supplier = Duke Energy            | Structures                     | 1      |         |
| St. John Methodist Church*                | Marion County/ Martel     | 109 minutes;<br>1,169 minutes | Supplier = Ocala Electric Utility | Structures                     | 1      |         |
| Westport High                             | Marion County/ Martel     | 164 minutes                   | Supplier = Ocala Electric Utility | Structures                     | 1      |         |
|   |                           |                               |                                   | Substations                    |        |         |
|   |                           |                               |                                   | <b>Total</b>                   | 8      |         |
|   |                           |                               |                                   | <i>Distribution</i>            |        |         |
|   |                           |                               |                                   | Poles                          |        |         |
|   |                           |                               |                                   | Substation                     |        |         |
| Inverness Middle*                         | Citrus County/ Inverness  | 4,006 minutes                 | Unknown                           | Feeder OH                      | 1      |         |

|  |                                  |                            |            |           |   |  |
|--|----------------------------------|----------------------------|------------|-----------|---|--|
| Astatula Elementary                                | Lake County/<br>Astatula         | 2,111 minutes              | Unknown    | Feeder OH | 1 |  |
| Pine Ridge Elementary*                             | Lake County/<br>South Highway 33 | 4,656 minutes              | Unknown    | Feeder OH | 1 |  |
| Round Lake Elementary and Sorrento Elementary*     | Lake County/<br>Sorrento         | 2,915 minutes              | Unknown    | Feeder OH | 1 |  |
| Spring Creek Charter Elementary                    | Lake County/<br>Paisley          | 1 minute;<br>8,218 minutes | Unknown    | Feeder OH | 1 |  |
| Belleview Middle and Belleview High                | Marion County/<br>Belleview      | 2,075 minutes              | Vegetation | Feeder OH | 1 |  |
| Hammett Bowen Jr. Elementary and Liberty Middle*   | Marion County/<br>Waterways      | 1,270 minutes              | Vegetation | Feeder OH | 1 |  |
| Harbour View Elementary*                           | Marion County/<br>Dallas         | 4 minutes                  | Unknown    | Feeder OH | 1 |  |
| Lake Weir Middle* and Villages Elementary          | Marion County/<br>Lady Lake      | 1 minute                   | Unknown    | Feeder OH | 1 |  |
| St. Jude Catholic Church*                          | Marion County/<br>Summerglen     | 2,571 minutes              | Unknown    | Feeder OH | 1 |  |
| Westport High                                      | Marion County/<br>Timberwood     | 8 minutes                  | Unknown    | Feeder OH | 1 |  |
| Lake Sumter State College Campus*                  | Sumter County/<br>Sumterville    | 6,363 minutes              | Unknown    | Feeder OH | 1 |  |
| South Sumter Middle* and Sumter County Fairgrounds | Sumter County/<br>Webster        | 1,062 minutes              | Unknown    | Feeder OH | 1 |  |

|   |                                    |               |                   |                  |    |  |
|---|------------------------------------|---------------|-------------------|------------------|----|--|
| Wildwood Millennium Park Community Center | Sumter County/<br>Continental      | 1,208 minutes | Unknown           | Feeder OH        | 1  |  |
| Lake Weir Middle* and Villages Elementary | Sumter County/<br>Lady Lake        | 2,317 minutes | Unknown           | Feeder UG        | 1  |  |
|   |                                    |               |                   | Feeder Combined  | 15 |  |
| Groveland Elementary*                     | Lake County/<br>Groveland          | 1,318 minutes | Unknown           | Lateral OH       | 1  |  |
| Seminole Springs Elementary*              | Lake County/<br>Sorrento           | 2,740 minutes | Unknown           | Lateral OH       | 1  |  |
| Horizon Academy*                          | Marion County/<br>Marion Oaks      | 3,854 minutes | Unknown           | Lateral OH       | 1  |  |
| Westport High                             | Marion County/<br>Martel           | 139 minutes   | Unknown           | Lateral OH       | 1  |  |
| Lake Panasoffkee Elementary*              | Sumter County/<br>Lake Panasoffkee | 6,292 minutes | Vegetation        | Lateral OH       | 1  |  |
| Sumter County Fairgrounds                 | Sumter County/<br>Webster          | 1,737 minutes | Unknown           | Lateral OH       | 1  |  |
|   |                                    |               |                   | Lateral UG       |    |  |
|   |                                    |               |                   | Lateral Combined | 6  |  |
|   |                                    |               |                   | <b>Total</b>     | 21 |  |
|   |                                    |               |                   | <i>Service</i>   |    |  |
|   |                                    |               |                   | Service OH       |    |  |
| Lake Minneola High*                       | Lake County/<br>Ferndale           | 400 minutes   | Equipment Failure | Service UG       | 1  |  |
|   |                                    |               |                   | Service Combined | 1  |  |
|   |                                    |               |                   | <b>Total</b>     | 30 |  |

\*Not open as shelters during Hurricane Irma.

## 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.

### **SECO Response (Irma)**

A review of the outage tickets for Hurricane Irma indicated that underground facilities performed better than overhead facilities. Approximately seven (7) percent of the outages that occurred during Hurricane Irma impacted SECO Energy’s underground facilities (overhead/underground hybrids, in most cases). The number of underground facilities that required repair or replacement for Hurricane Irma were as follows: 69 underground riser poles, 47 underground transformers, 28 underground fuse cabinets, 14 transformer fuses, two (2) underground secondary cable, one (1) underground primary cable, one (1) lateral fuse, one (1) elbow, and one (1) secondary enclosure.

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

### **SECO Response (Irma)**

Counties and municipalities served by SECO Energy now require high-density subdivisions to be served by underground facilities. SECO actively monitors outages/causes throughout normal operations and following storm damage to determine other locations that would be better served with underground facilities.

The table below indicates the miles of line SECO has added from 2012-2017.

|                  |           |       |
|------------------|-----------|-------|
| Overhead line    | 33 miles  | 5.4%  |
| Underground line | 579 miles | 94.6% |
| Total added      | 612 miles |       |