3455 Airport West Drive
P.O. Box 1389
Vero Beach, Fl 32961-1389

Phone: 772-978-5460
Fax: 772-770-6835
Email: Tfletcher@covb.org

02/14/2018

Florida Public Service Commission
Office of Commission Clerk
Tallahassee, Florida, 32399-0805

RE: City of Vero Beach Electric Utility for Docket No. 20170215-EU-Review of Electric utility hurricane preparedness and restoration actions.

COVB has prepared a submittal for the above referenced subject. Our responses are incorporated into the FPSC staff's attached letter as requested.

If you have any questions, please feel free to contact me at (772) 978-5460 or email: tfletcher@covb.org.

Sincerely,

Ted Fletcher

Ted Fletcher
Electric Utility Director

STATE OF FLORIDA

Public Service Commission

December 21, 2017

STAFF'S FIRST DATA REQUEST
via email

James O'Conner
City Manager
1053 20th Place
Vero Beach, FL 32960
citymgr@covb.org

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

Dear Mr. O'Connor:

By this letter, the Commission staff requests that each utility provide responses to the following data requests.

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.
   August 31st, 2017 – Special call meeting with City Manager to discuss hurricane preparation, policies and procedures.
   We started reviewing all current contracts to secure mutual aid, Emergency Essential personnel and Post-Recovery personnel requirements, ordering materials for line crews. We work with purchasing division to secure food and lodging for out of town crews. We make sure that our trucks are fully stocked and fueled.

   b. Dates and topics of external communication pertaining to mutual aid held after each storm was named.
   September 4th, 2017 – Request sent to City Manager to secure Mutual Aid.
   If we feel that our own crews will be able to handle the restoration we will not reach out for mutual aid. If we think that the damage will be severe enough, we reach out to American Public Power Association, APPA, and request mutual aid through our in-state and nationwide resources.

c. Date mutual aid was requested and nature of request.
September 7th, 2017, COVB reached out to FPL and the Governors' Office for Mutual Aid in the form of linemen and tree crews.

2. Please provide a detailed description of the utility's allocation of storm duties for all personnel. This should include a description of each function and the number of utility personnel assigned.

Job Title	Storm Duties	Number Assigned Personnel
Director, Electric Utility	Oversee the overall preparation and restoration of all electric utility customers.	52
Manager, T&D Operations	Responsible for coordinating mutual aid and restoration.	31
Manager, Electric Systems Development	Responsible for the management of OMS system and social media communications. Coordinate the production of digital maps, schematics, and diagrams as required for field coordination of restoration.	0
Supervisor, Construction & Maintenance	Responsible for the communication with Supervisor of System Operations and Line workers for restorations updates and crew assignment.	13
Supervisor, T&D operations	Responsible for the management of the command center and substations to complete restoration. Coordinate with Manager of Electric Syst. Development and Supervisor of Construction & Maintenance.	13
Supervisor, Electric System Design	Oversee the assignment of Project Coordinators and Eng. Tech (both categories utilized as bird dogs) for field coordination with mutual aid crews. Coordinate with Purchasing division for lodging, food and mutual aid logistics.	5
Group Leader Line workers(3)	Responsible for initial damage assessment, coordination of restoration, and crew deployment.	10
Group Leader, Electric Metering	Responsible for initial damage assessment, coordination of restoration, crew deployment, and meter services workers assignment.	8
Group Leader, Substation	Responsible for communication of system damage assessment and coordination of restoration of BES elements and substations	4
Senior Admin. Assistant	Assigned as liaison between Electric department and the EEOC. Stationed at the EEOC headquarters to communicate restoration logistics.	0
SCADA/EMS Administrator	Responsible for SCADA network.	1
Electric System Programmer	Responsible for SCADA network functions.	0

Dispatchers(6)	Responsible for operation of BES elements, breakers and feeders, and operation of OMS.	0
Line workers(10)	Responsible for restoration of electric utility customers.	0
Project Coordinators(5)	Utilized as bird dogs – responsible to lead mutual aid contractors to location of damages and assist with restoration of electric utility customers.	0
Electric Meter Services(6)	Responsible for FEMA documentation of all material used, hours and locations of restoration efforts. Assigned miscellaneous duties for restoration, delivering and staging of materials to line crews.	0
EHS Specialist	Responsible for preparation, purchasing of food and other products during storms.	0
Electric Eng. Specialist	Responsible for customer solutions liaison, coordinates social media communications, food and lodging coordination for restoration team, tracking of FEMA mandatory documents for reimbursement.	0

3. When did the costs for Hurricanes Hermine, Matthew, Irma, Maria, and Nate begin to accrue for receiving mutual aid?
Hurricane Matthew – 10/6/16
Hurricane Irma – 9/9/17

Damage Assessment Process

4. Please provide a detailed overview of the initial damage assessment process for Hurricanes Hermine, Matthew, Irma, Maria, and Nate, including the number of utility employees or contractors involved, their duties, and how initial damage assessment is disseminated within the utility to assist in restoration activities. Additionally, please provide photographs or other visual media that memorializes storm damage, which was documented during the initial damage assessment process.
COVB's Initial Assessment team includes the following:
   i. One (1) T&D Director
   ii. One (1) Supervisor of Construction and Maintenance
   iii. Four (4) T&D group leaders

When wind speeds have dropped below 35 MPH, qualified staff begins immediately to assess any transmission lines and distribution lines that provide service to critical customers such as the hospital, public service facilities, water plant, wastewater plant, special needs, storm shelters, nursing homes, assisted living facilities etc.
Immediately following the initial assessment and restoration of any critical customers, the initial damage assessment continues for each feeder that opened as a result of the storm. Additionally, each feeder that remained energized throughout the storm is assessed for isolated lateral outages and potential hazards.

See below for photographs

Figure 1 : Pic_7

Figure 2 : Pic_63

Figure 3 : Pic_65

Figure 4 : Pic_106

Figure 5 : Pic_18

Figure 6 : Pic_10

Figure 7 : Pic_19

Figure 8 : Pic_28

Figure 9 : Pic_70

Figure 10 : Pic_151

Figure 11 : Pic_447

Figure 12 : Pic_456

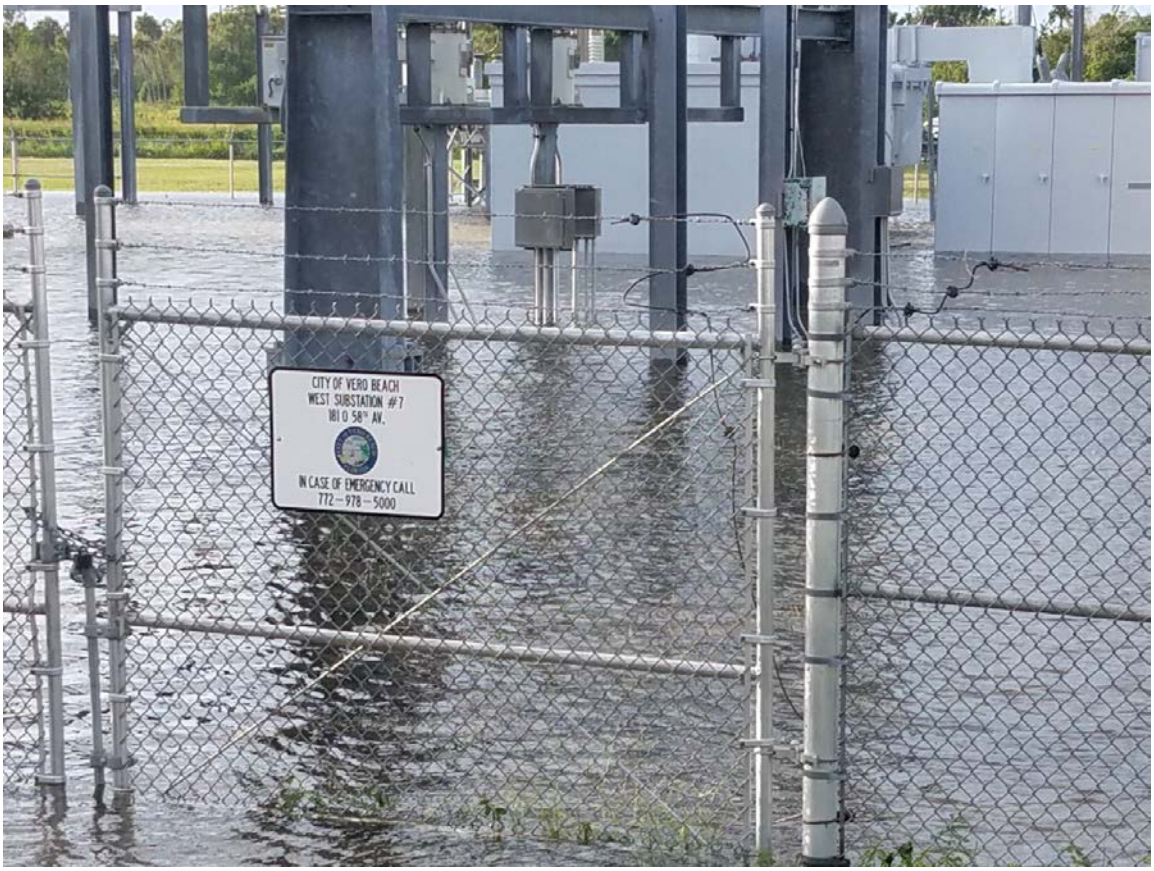


Figure 13 & 14: ST_7

5. Please provide a description of how damage assessment data is updated and communicated internally.
Damage assessment data and hazards (downed wires, broken poles, blown fuses, damaged equipment, vegetation issues, etc.) are communicated over radio from the field assessors to dispatch operators who entered it into the Outage Management Software (OMS).

Restoration Workload

6. Please provide a detailed description of how the utility determines when and where to start restoration efforts.
The assessment team used the following process:
   i. Assess transmission lines
   ii. Assess substations for damages
   iii. Assess feeders for damages. If there are damages, proceed with:
      1) Isolate as needed and communicate the isolation and associated hazard to dispatch operators.
      2) Restore feeder after repair.
   iv. Restore large numbers of customers, critical customers, nursing homes, hospital etc.
   v. Assess each lateral for damages. If there are damages, proceed with:
      1) Isolate as needed and communicate the isolation and associated hazard to dispatch operators.

Restore each laterals based on the largest number of affected customers provided from dispatch operators' OMS.

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

Personnel Responsible for Restoration Workload Assignments		
Title	Years of experience	Number of crews managed
Director, Electric Utility	36	2 in-house, 2 mutual aid
Manager, T&D Operations	30	0
Supervisor, T&D Operations	36	0
Group Leader, UG outages	30	3 mutual aid
Group Leader, Tree and line	40	1 in-house, 2 mutual aid
Group Leader, OH and Trouble Calls	36	2 in-house, 1 mutual aid
Group Leader, Electric Meter Services	25	2 mutual aid

8. Please provide a description of how restoration workload adjusts based on work completed and updates to damage assessments.
When laterals or isolated areas were repaired, it was communicated back to the dispatch operators to update the OMS. The outage data was managed by the dispatchers to sort the largest groups of customers without power. If any areas required replacement of poles, the mutual aid crews were assigned the work which allowed the local crews to quickly navigate throughout the service area to restore as many customers as possible.

9. If applicable, please describe how mutual aid was determined to be no longer needed following Hurricanes Hermine, Matthew, Irma, Maria, and Nate.
The need for mutual based aid was based on the percentage of restoration remaining and the type of work that was needed. Management team determined if our internal crews would be able to handle the work on their own.

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)
    Hurricane Matthew – 63 person-days
    Hurricane Irma – 124 person-days
    (Figures include City contractor personnel)
    b. Days of lodging provided for mutual aid partners (Person-Days)
    Hurricane Matthew – 324 person-days
    Hurricane Irma – 74 person-days
    c. Number of meals provided for Utility personnel
    Three (3) meals a day during the storm and also during restoration.
    d. Number of meals provided for mutual aid partners
    Three (3) meals a day for all work performed during the restoration. COVB also reimbursed these utilities for money spent on meals while traveling.
    Total of meals provided to both categories as follows:
    Hurricane Matthew – 3,902
    Hurricane Irma – 2,242
    e. Number of Utility personnel injuries: 0
    f. Number of mutual aid partner injuries: 0
    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. N/A

11. Please provide a detailed description of when your Utility was considered fully restored from each named storm event.
COVB considered full restoration when all customers that could be restored were restored. Those that remained without power could not be restored at that time due to customer damage either to their weather head or to their structure. We work closely with the Indian River County (IRC) Building Department to ensure they were aware of each location that was not able to be restored and why.

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
    Hurricane Matthew – 34,386
    Hurricane Irma – 35,100
    b. Peak number of outages
    Hurricane Matthew – 23,721
    Hurricane Irma – 33,700

13. Please provide how call center customer service representatives were utilized before, during and after Hurricanes Hermine, Matthew, Irma, Maria, and Nate.
    Customer Service Center:
    Before – Customer service center phones and walk in lobby open 8:30 AM to 5:00 PM.
    During – Emergency Operations Center personnel manning phones to include utility customer calls 24 hours per day.
    After – Customer Service center phone and walk in lobby open 8:30 AM to 5:00 PM.

14. Please provide the number of customer service representatives the Utility had during Hurricanes Hermine, Matthew, Irma, Maria, and Nate.
    Customer Service staffing for both Matthew and Irma – 15 Customer Service representatives, two Customer Service Managers, 2 Field Services Representatives before and after storm event.
    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?
    Yes, Emergency Operations Center phones during storm event manned by 3 staff members from City Clerk's office and Finance department.

15. Please provide the number of customer contacts received by the customer call center(s) during Hurricanes Hermine, Matthew, Irma, Maria, and Nate.
    Matthew (2016) = 10,288
    Irma (2017) = 16,991

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.
    We utilized:
    - Call center
    - Email
    - Interactive Voice Response (IVR) that is integrated into our Customer Information System (CIS) as well as our OMS. This allowed logging and outage prediction to our dispatch center.
    - Social media (Facebook, and Nextdoor)

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.
        i. During Hurricane Matthew, both the COVB's Electric Utility and Police Department used texting services and news bulletins to keep our customers informed before and after the storm. After the storm, Customer Service received calls and communicated their needs to the dispatch operators.
        ii. Before, during, and after Hurricane Irma, COVB staff used social media to stay in constant communication with our customers. After the storm, Customer Service received calls and communicated their needs to the dispatch operators.

18. Please provide whether or not customer contacts are categorized (by concern, complaint, information request, etc.) If so, how are they categorized? If not, why not?
    A customer was grouped into one of the two categories:
    1) Life threatening. Any call that was eminent danger to human life such as, live downed wire, broken poles, arcing or sparking equipment.
    2) Out of power. Any call that was not life threatening.

19. Please provide a detailed description of how customer service representatives are informed of restoration progress.
    Information was relayed to customer representatives by email or by phone.
    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?
        No formal script, but management maintained close contact with customer service reps to facilitate a consistent message to customers. Also, customer had access to a web-based outage map to view progress of restoration.

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.
        During the restoration process immediately following the storm, restoration times were not provided to customers until after the main feeders were restored. As outage percentages declined, customers were provided approximate restoration times. In an effort to minimize call backs, customers were given an end of day time frame for restoration. The customers were advised to call back in the morning if they were still out of power.

    b. How customers are notified.
        Customer were notified over the phone via IVR, web-based outage map, Facebook and Nextdoor.

c. How restoration time estimates are updated.
Restoration times were provided to the customers through the web portal or by calling customer representatives.

d. How restoration time estimates are disseminated internally, to the county and state Emergency Operations Centers, and to the public.
COVB had a designated staff representative at the County Emergency Operations Center (EOC) to provide updates every three hours. COVB also sent outage information every 3 hours to the State of Florida Municipal EOC to be compiled and sent to the Governor.

Material Considerations

21. Regarding Hurricanes Hermine, Matthew, Irma, Maria, and Nate, please provide a description of how vehicle fuel was procured for Utility personnel and mutual aid partners. As part of the response, please answer the following:
a. Whether or not the Utility has fuel stored for these types of events
A week prior to the storm, COVB fuel storage was restocked per contract with the local provider.

b. Whether or not fuel shortage was an issue during these events
COVB did not experience any fuel shortage after the storm.

c. Whether or not there were any delays due to fuel shortage
COVB did not experience any fuel shortage delays.

d. Whether or not there were enough vehicles available during these events/any issues mobilizing crews
Mutual Aid crews did not have any issues while in route to Vero Beach.

22. Please detail any complications or delays such as shortage or delayed delivery of materials for Hurricanes Hermine, Matthew, Irma, Maria, and Nate.
COVB did not experience any delays or shortage of materials.

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.
COVB follows the same general process for all Hurricanes:
i. When an advisory is issued for our area, we begin fueling vehicles and emergency generators, stocking trucks, gathering emergency food, supplies and spare parts.
ii. When a watch is issued for our service area, we begin preparations for securing buildings and vehicles, and the purchase of any necessary materials. We also begin assessment of mutual aid needs and start communication with APPA. We begin to secure meals and lodging for all crews (both in-house and mutual aid.

iii. When a warning is issued for our service area, the final preparation for facilities and set up for restoration occur. Mutual aid crews are secured and are either staged or ready for deployment depending on storm track projections. Final preparations with all Emergency Essential staff staged on site are made.

iv. During the storm, the system is being monitored and planning is taking place for storm restoration.

v. As soon as it is safe to travel all Emergency Essential personnel staged on site will start damage assessment and restoration of critical circuits. All employees that were not defined as critical are called back in for restoration. Mutual aid crews are brought in. Food and lodging are available and given to mutual aid workers.

vi. As restoration progresses, COVB's team will determine the needs of our system to decide on the length and number of crews required. As outage numbers decline decisions are made as to length of stay for mutual aid crews. Prior to release, we communicate with APPA to determine if the crews will be heading back to their home base or to another utility in need. We will continue working until all customers that can be restored are restored.

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

a. If the Utility does not assess departures from its storm plan, explain why not.

b. If the Utility does not document or otherwise memorialize departures from its storm plan, explain why not.

c. Have departures from the Utility's storm preparation plan resulted in modification of the storm preparation plan during 2015 through 2017? If so, please explain how with examples.

After every hurricane, we perform a storm debrief and determine lessons learned. These lessons learned are incorporated into our planning process.

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

a. If the Utility does not assess departures from its storm restoration plan, explain why not.

b. If the Utility does not document or otherwise memorialize departures from its restoration storm plan, explain why not.

c. Have departures from the Utility's storm restoration plan resulted in modification of the storm restoration plan during 2015 through 2017? If so, please explain how with examples.

One change that usually occurs is the order in which priority feeders are restored, depending on the amount of damages to the system. We may have to get a non priority feeder into an area that the priority feeder riser pole is damaged.

Outages

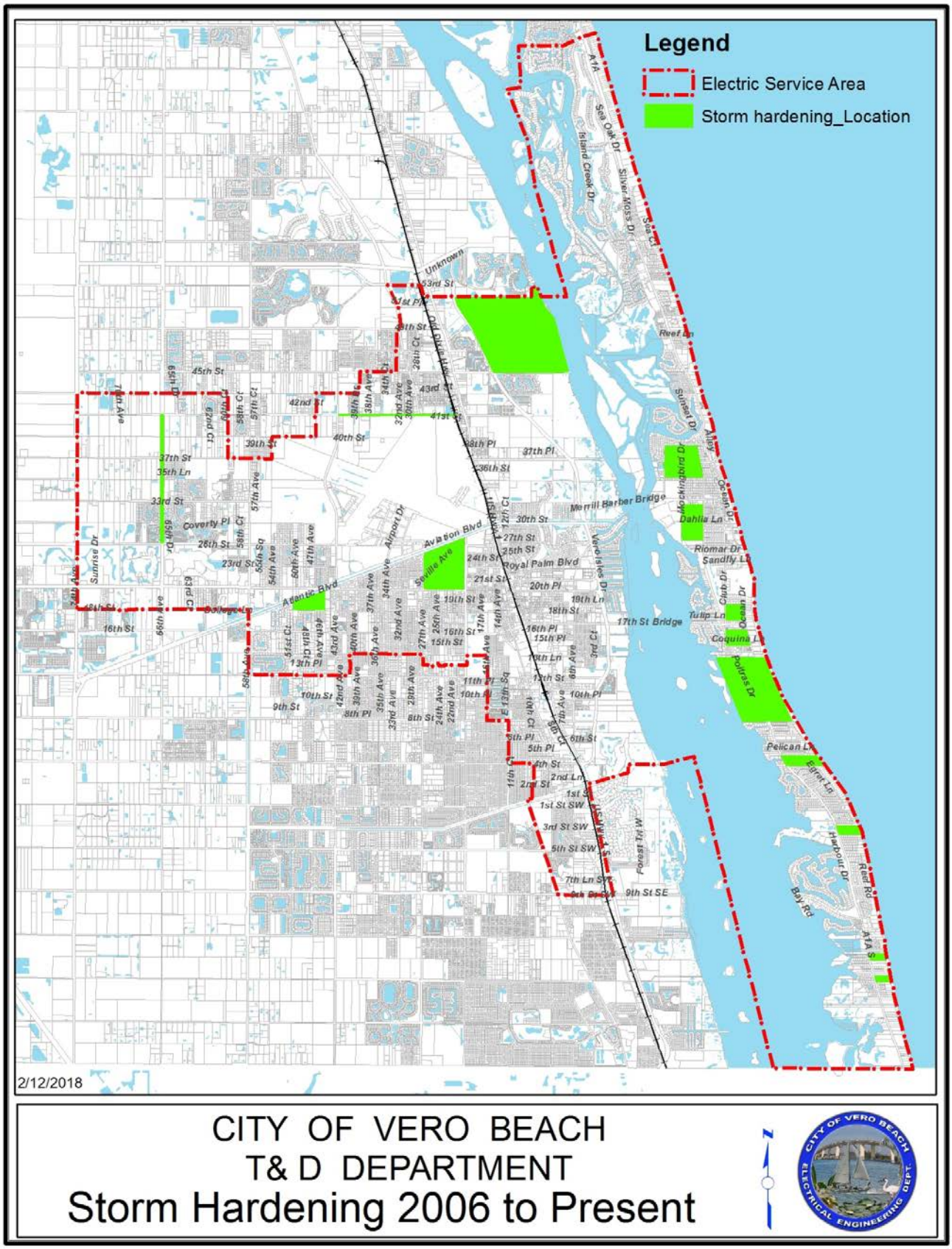
26. Please identify all counties, including reporting regions/division for each county if applicable, that were impacted (had outages or damage) due to Hurricanes Matthew, Hermine, Irma, Maria, and Nate.
COVB's service territory is only in part of Indian River County.

27. Please complete the table below summarizing the wind speed and flooding impacts by county in the utility's service area. If the requested information is not available by county, please provide the information on a system basis. Please provide this information for Hurricanes Matthew, Hermine, Irma, Maria, and Nate.

Weather Impact				
County	Maximum Sustained Winds (MPH)	Maximum Gusts (MPH)	Maximum Rainfall (inches)	Maximum Storm Surge (Feet)
IRC-Matthew	62	97	13.85	N/A
IRC-Irma	40	62	14.15"	2-3'

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.
The map below identifies the location of assets such as poles, underground primary and secondary work that have been replaced after 2006. Since 2005, all new projects are designed to Grade B construction and considered as a storm hardening improvement.


Legend
Electric Service Area
Storm hardening_Location
2/12/2018
CITY OF VERO BEACH
T& D DEPARTMENT
Storm Hardening 2006 to Present

29. Please complete the table below summarizing hardened facilities that required repair or replacement as a result of Hurricanes Matthew, Hermine, Irma, Maria, and Nate.

Hardened Facilities Matthew		
Hurricane	**Number of Facilities Requiring**	
	Repair	**Replacement**
Transmission	Vero's hardened Facilities Ok	Vero's hardened Facilities Ok
Structures	0	0
Substations	0	0
Total	0	0
Distribution		
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
Total	0	0
Service		
Service OH	0	0
Service UG	0	0
Service Combined	0	0
Total	0	0

Hardened Facilities Irma		
Hurricane	**Number of Facilities Requiring**	
	Repair	**Replacement**
Transmission	Vero's hardened Facilities Ok	Vero's hardened Facilities Ok
Structures	0	0
Substations	0	0
Total	0	0
Distribution		
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

Total	0	0
Service		
Service OH	0	0
Service UG	0	0
Service Combined	0	0
Total	0	0

30. Please complete the table below summarizing non-hardened facilities that required repair or replacement as a result of Hurricanes Matthew, Hermine, Irma, Maria, and Nate.

Non-Hardened Facilities Matthew		
Hurricane	**Number of Facilities Requiring**	
	Repair	**Replacement**
Transmission		
Structures	0	0
Substations	1	0
Total	1	0
Distribution		
Poles	0	74
Substation	0	0
Feeder OH	1,440 ft	485 ft
Feeder UG	0	0
Feeder Combined	1,440 ft	485 ft
Lateral OH	20,000 ft	14,399 ft
Lateral UG	0	2824 ft
Lateral Combined	20,000 ft	17,223 ft
Total	21,440 ft	17,708 ft
Service		
Service OH	0	4,400 ft
Service UG	0	3,828 ft
Service Combined	0	8,224 ft
Total	21,440 ft	25,936 ft

Non-Hardened Facilities Irma		
Hurricane	**Number of Facilities Requiring**	
	Repair	**Replacement**
Transmission		
Structures	0	0
Substations	1	0
Total	1	0
Distribution		
Poles	0	18
Substation	1	0

Feeder OH	455 ft	130 ft
Feeder UG	0	0
Feeder Combined	455 ft	130 ft
Lateral OH	27,000 ft	19,832 ft
Lateral UG	0	240 ft
Lateral Combined	27,000 ft	20,072 ft
Total	27,455 ft	20,200 ft
Service		
Service OH	0	1,520 ft
Service UG	0	57 ft
Service Combined	0	1,577 ft
Total	27,455 ft	21,777 ft

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.
    1) Vegetation on power lines
    2) Broken poles due to wind damage
    3) Damaged weather heads
    4) Salt tracking on transmission lines
    5) Substation flooding

32. For Hurricanes Matthew, Hermine, Irma, Maria, and Nate, please provide a ranking of the top five drivers that protracted service restoration time.
    1) Vegetation clearing
    2) Pole replacement
    3) Customer point of service connections

33. If applicable, please describe any damage prevented by flood monitors during Hurricanes Matthew, Hermine, Irma, Maria, and Nate.
    COVB does not use flood monitors for the electric system.

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.
    COVB does not use automated feeder switches.

Critical Infrastructure Restoration

35. Please complete the table below for all critical infrastructure facilities (CIFs), by location (city/county) and facility type, which lost power, the restoration time for the CIFs and the cause of the outage (such as wind, storm-surge, flooding, debris, etc.) and facilities structure type that required replacement and/or repair. Please provide this information for Hurricanes Matthew, Hermine, Irma, Maria, and Nate.

Hurricane Matthew – CIF						
CIF Name/Type (i.e. Hospital)	**County/ Location**	**Restoration Time**	**Outage Cause**	**Number of Facilities Requiring**		
IRM Hospital	IRC	9 hrs	Wind		**Repair**	**Replace**
Water plant	IRC	<1 hr	Wind	***Transmission***	0	0
Waste Water Plant	IRC	12 hrs	Wind	Structures	0	0
Police Department	IRC	30 hrs	Wind	Substations	0	0
				Total	0	0
				Distribution		
				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
				Total	0	0
				Service		
				Service OH	0	0
				Service UG	0	0
				Service Combined	0	0
				Total	0	0
Hurricane Irma – CIF						
CIF Name/Type (i.e. Hospital)	**County/ Location**	**Restoration Time**	**Outage Cause**	**Number of Facilities Requiring**		
IRM Hospital	IRC	16 hrs	Wind		**Repair**	**Replace**
Water plant	IRC	14 hrs	Wind	***Transmission***	0	0
Waste Water Plant	IRC	12 hrs	Wind	Structures	0	0
Police Department	IRC	25 hrs	Wind	Substations	0	0
				Total	0	0
				Distribution		
				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
				Total	0	0
				Service		
				Service OH	0	0
				Service UG	0	0
				Service Combined	0	0
				Total	0	0

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.
    1) Underground facilities performed well during the hurricane.
    2) Three pieces of underground live front equipment were damaged due to water intrusion. These facilities and similar facilities will be replaced with dead front equipment as part of an on-going storm hardening plan.

37. Please provide a discussion what programs/tariffs the utility has in place to promote
    a. Undergrounding of new construction (e.g., subdivisions)
       For all new projects, COVB requires that all new services must be constructed underground.
    b. Conversion of overhead to underground
       1) During the yearly assessment of assets, problem areas are identified and budgeted for underground conversion pending age and reliability concerns.
       2) COVB offers a discounted rate of construction to convert to underground.

Please file all responses electronically no later than January 22, 2018 from the Commission's website at www.floridapsc.com, by selecting the Clerk's Office tab and Electronic Filing Web Form. Please contact me at wtaylor@psc.state.fl.us or at 850.413.6175 if you have any legal questions, or contact Emily Knoblauch for technical questions at eknoblau@psc.state.fl.us or at 850.413.6632.

Sincerely,

/s/*Wesley Taylor*

Wesley Taylor
Attorney

WDT/as

cc: Office of Commission Clerk