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March 1, 2017

Mr. Thomas Ballinger, Director  
Division of Engineering  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0868

Dear Mr. Ballinger:

Attached is Florida Public Utilities Company's required 2016 Annual Update. The update includes the Annual Distribution Service Reliability Report required by Rule 25-6.0455, the Annual Wood Pole Inspection Report required by Order No. PSC-06-0144, and updates of our Storm Hardening Plan and Ten Storm Preparedness Initiatives, as required by Order No. PSC-06-0781.

If you have any questions, please call (904) 530-7058 or e-mail [dshelley@chpk.com](mailto:dshelley@chpk.com) .

Sincerely,

A handwritten signature in black ink that reads "Buddy Shelley". The signature is written in a cursive, flowing style.

Buddy Shelley  
Director, Electric Operations Florida Public Utilities Company

Attachments  
Cc:  
Commission Clerk  
Mike Cassel  
Warren DiNapoli  
Householder, Jeff  
Martin Cheryl  
Puentes, Jorge  
Toole, Steve  
Webber, Kevin

# Florida Public Utilities Company

Reliability, Wood Pole Inspections,  
Storm Hardening Plan, and  
Storm Preparedness Initiatives

2016 Annual Update

March 1, 2017



# **Florida Public Utilities Company**

## **Reliability, Wood Pole Inspections, Storm Hardening, and Storm Preparedness Initiatives**

### **Annual Update**

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# Introduction

This is the FPUC annual update. The update includes the Annual Distribution Service Reliability Report required by Rule 25-6.0455, the Annual Wood Pole Inspection Report required by Order No. PSC-06-0144, and updates of our Storm Hardening Plan and Ten Storm Preparedness Initiatives, as required by Order No. PSC-06-0781. The update is divided into four primary sections: I. Reliability Indices; II. Wood Pole Inspections; III. Storm Hardening; and, IV. Storm Preparedness Initiatives. FPUC report forms, research reports, contractor reports, and other available supplemental supporting documentation are incorporated into the appropriate sections of the update. FPSC reliability index report forms have been updated and are also included.

FPUC has two electric divisions, Northwest (NW) Division, also referred to as Marianna, and Northeast (NE) Division, also referred to as Fernandina Beach. In some cases, each division's results are reported separately. For example, NW has no transmission facilities. Therefore, only NE will be reporting on Storm Preparedness Initiatives #3 (Six Year Transmission Structure Inspections) and #4 (Storm Hardening of Existing Transmission Structures). Also, the two divisions are approximately 250 miles apart and, although they may supply resources to support one another during emergency situations, each division will prepare separate emergency response plans to address Initiative #10 (Natural Disaster Preparedness and Recovery Program). In other cases, consolidated reports or a combination of individual and consolidated reports provide a more complete overview and reports are prepared accordingly.

# I. Reliability Indices

This section contains the FPUC Annual Distribution Service Reliability Report required by Florida Public Service Commission (FPSC) Rule 25-6.0455.

In addition to the supporting data provided by FPUC for clarification, the report was prepared using the forms developed by FPSC. Indices are reported on an *actual* and *adjusted* basis, as follows:

- a. Total number of Outage Events (N), categorized by cause for the highest ten causes.
- b. Identification of three percent (3%) of Primary Circuits (feeders) with the highest number of feeder breaker interruptions.
- c. SAIDI, CAIDI, SAIFI, and L-Bar reliability indices for each division and by company total\*.

Indices are calculated as follows:

$$\text{SAIDI} = \text{System Average Interruption Duration Index} = \frac{\text{Total Customer Minutes of Interruption (CMI)}}{\text{Total Number of Customers Served (C)}}$$

$$\text{CAIDI} = \text{Customer Average Interruption Duration Index} = \frac{\text{Total Customer Minutes of Interruption (CMI)}}{\text{Total Number of Customer Interruptions (CI)}}$$

$$\text{SAIFI} = \text{System Average Interruption Frequency Index} = \frac{\text{Total Number of Customer Interruptions (CI)}}{\text{Total Number of Customers Served (C)}}$$

$$\text{L-Bar} = \text{Average Duration of Outage Events} = \frac{\text{Sum of All Outage Event Durations (L)}}{\text{Total Number of Outage Events (N)}}$$

\* The FPUC total electric retail customer count is well below 50,000. Per Rule 25-6.0455, (3) (c), MAIFIe and CEMI5 indices are not applicable (N/A) and not reported at this time.

Forms reporting *actual* data include all outage events. Forms reporting *adjusted* data exclude outage events directly caused by one or more of the following, if applicable:

- a. Planned Service Interruptions;
- b. A storm named by the National Hurricane Center;
- c. A tornado recorded by the National Weather Service;
- d. Ice on lines;
- e. A planned load management event;
- f. Electric generation or transmission events not governed by subsections 25-6.018 (2) and (3);
- g. Extreme weather or fire events causing activation of the county emergency operation center.

Definitions from Rule 25-6.044 'Continuity of Service' are provided below for clarification:

- a. **“Area of Service.”** A geographic area where a utility provides retail electric service. An Area of Service can be the entire system, a district, or a sub-region of the utility’s system in which centralized distribution service functions are carried out.
- b. **“Average Duration of Outage Events (L-Bar).”** The sum of each Outage Event Duration (L) for all Outage Events occurring during a given time period, divided by the Number of Outage Events (N) over the same time period within a specific Area of Service.
- c. **“Customer Average Interruption Duration Index (CAIDI).”** The average time to restore service to interrupted retail customers within a specified Area of Service over a given period of time. It is determined by dividing the sum of Customer Minutes of Interruption (CMI) by the total number of Service (aka Customer) Interruptions (CI) for the respective Area of Service.
- d. N/A (CEMI5).
- e. **“Customer Minutes of Interruption (CMI)”**. For a given Outage Event, CMI is the sum of each affected retail customer’s Service Interruption Duration.
- f. thru h. N/A (MAIFIE)
- i. **“Number of Customers Served (C).”** The sum of all retail customers on the last day of a given time period within a specific Area of Service.
- j. **“Number of Outage Events (N).”** The sum of Outage Events for an Area of Service over a specified period of time.
- k. **“Outage Event.”** An occurrence that results in one or more individual retail customer Service Interruptions.
- l. **“Outage Event Duration (L).”** The time interval, in minutes, between the time a utility first becomes aware of an Outage Event and the time of restoration of service to the last retail customer affected by that Outage Event.
- m. **“Service Interruption.”** The complete loss of voltage of at least one minute to a retail customer. (CI for one customer).
- n. **“Service Interruption Duration.”** The time interval, in minutes, between the time a utility first becomes aware of a Service Interruption and the time of restoration of service to that retail customer. (CMI for one customer).
- o. **“System Average Interruption Duration Index (SAIDI).”** The average minutes of Service Interruption Duration per retail customer served within a specified Area of Service over a given period of time. It is determined by dividing the total Customer Minutes of Interruption (CMI) by the total Number of Customers Served (C) for the respective Area of Service.
- p. **“System Average Interruption Frequency Index (SAIFI).”** The average number of Service Interruptions per retail customer within a specified Area of Service over a given period of time. It is determined by dividing the sum of Service (aka Customer) Interruptions (CI) by the total Number of Customers Served (C) for the respective Area of Service.
- q. **“Planned Service Interruption.”** A Service Interruption initiated by the utility to perform necessary scheduled activities, such as maintenance, infrastructure improvements, and new construction due to customer growth.

**FLORIDA PUBLIC SERVICE COMMISSION  
ANNUAL DISTRIBUTION SERVICE RELIABILITY REPORT – ACTUAL**

**PART I**

<u>CAUSES OF OUTAGE EVENTS – ACTUAL</u>			
Utility Name: <b>Florida Public Utilities Company- NE Division</b>			Year: <b>2016</b>
Cause (a)	Number of Outage Events(N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)
Named Storm	249	817.36	782.37
Defective Equipment	82	93.88	98.50
Animal	63	53.79	89.41
Vegetation	53	78.71	71.20
Unknown	37	98.09	47.21
Other	23	89.62	139.38
Lightning	22	76.15	120.69
Planned Outage	15	42.34	19.84
Other Weather	10	76.62	84.92
Corrosion	9	110.40	106.75
Transmission	7	146.10	142.00
Substation	6	123.21	123.54
Vehicle	4	65.90	64.51
<b>System Totals NE</b>	580	397.53	408.45

PSC/ECR 102-1(a) (8/06)  
Incorporated by reference in Rule 25-6.0455,  
Florida Administrative Code

**FLORIDA PUBLIC SERVICE COMMISSION  
ANNUAL DISTRIBUTION SERVICE RELIABILITY REPORT –  
ADJUSTED**

**PART I**

<u>CAUSES OF OUTAGE EVENTS – ADJUSTED</u>			
Utility Name: <b><u>Florida Public Utilities Company- NE Division</u></b>			Year: <b><u>2016</u></b>
Cause (a)	Number of Outage Events(N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)
Defective Equipment	82	93.88	98.50
Animal	63	53.79	89.41
Vegetation	53	78.71	71.20
Unknown	37	98.09	47.21
Other	23	89.62	139.38
Lightning	22	76.15	120.69
Other Weather	10	76.62	84.92
Corrosion	9	110.40	106.75
Vehicle	4	65.90	64.51
<b>System Totals NE</b>	<b>303</b>	<b>81.35</b>	<b>90.28</b>

PSC/ECR 102-1(b) (8/06)  
Incorporated by reference in Rule 25-6.0455,  
Florida Administrative Code



**FLORIDA PUBLIC SERVICE COMMISSION  
ANNUAL DISTRIBUTION SERVICE RELIABILITY REPORT – ACTUAL**

**PART I**

<u>CAUSES OF OUTAGE EVENTS – ACTUAL</u>			
Utility Name: <b>Florida Public Utilities Company- NW Division</b>			Year: <b>2016</b>
Cause (a)	Number of Outage Events(N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)
Vegetation	383	77.96	73.59
Animal	291	49.79	52.97
Other Weather	138	152.25	186.82
Lightning	106	83.39	99.39
Defective Equipment	81	93.31	131.61
Unknown	52	58.51	50.99
Other	35	48.63	37.01
Planned Outage	33	88.39	63.58
Vehicle	22	131.60	89.80
Corrosion	3	78.03	85.26
Named Storm	2	133.65	127.87
Substation	1	102.32	102.32
Transmission	1	102.00	102.00
<b>System Totals NW</b>	<b>1148</b>	<b>81.03</b>	<b>97.95</b>

PSC/ECR 102-1(a) (8/06)  
Incorporated by reference in Rule 25-6.0455,  
Florida Administrative Code

**FLORIDA PUBLIC SERVICE COMMISSION  
ANNUAL DISTRIBUTION SERVICE RELIABILITY REPORT –  
ADJUSTED**

**PART I**

<u>CAUSES OF OUTAGE EVENTS – ADJUSTED</u>			
Utility Name: <b>Florida Public Utilities Company – NW Division</b>			Year: <b>2016</b>
Cause (a)	Number of Outage Events(N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)
Vegetation	383	77.96	73.59
Animal	291	49.79	52.97
Other Weather	138	152.25	186.82
Lightning	106	83.39	99.39
Defective Equipment	81	93.31	131.61
Unknown	52	58.51	50.99
Other	35	48.63	37.01
Vehicle	22	131.60	89.80
Corrosion	3	78.03	85.26
<b>System Totals: NW</b>	<b>1111</b>	<b>80.67</b>	<b>98.26</b>

PSC/ECR 102-1(b) (8/06)  
Incorporated by reference in Rule 25-6.0455,  
Florida Administrative Code

**FLORIDA PUBLIC SERVICE COMMISSION  
ANNUAL DISTRIBUTION SERVICE RELIABILITY REPORT – ACTUAL**

<u>CAUSES OF OUTAGE EVENTS – ACTUAL</u>			
Utility Name: <b>Florida Public Utilities Company- FPUC Total</b>			Year: <b>2016</b>
Cause (a)	Number of Outage Events(N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)
Vegetation	436	78.05	73.06
Animal	354	50.50	73.61
Named Storm	251	811.91	782.32
Defective Equipment	163	93.60	103.29
Other Weather	148	147.14	184.79
Lightning	128	82.14	103.39
Unknown	89	74.97	48.25
Other	58	64.89	107.07
Planned Outage	48	74.00	23.60
Vehicle	26	121.49	89.71
Corrosion	12	102.31	105.08
Transmission	8	140.59	126.97
Substation	7	120.23	119.65
<b>System Totals FPUC</b>	<b>1728</b>	<b>187.26</b>	<b>309.89</b>

PSC/ECR 102-1(a) (8/06)  
Incorporated by reference in Rule 25-6.0455,  
Florida Administrative Code

**FLORIDA PUBLIC SERVICE COMMISSION  
ANNUAL DISTRIBUTION SERVICE RELIABILITY REPORT –  
ADJUSTED**

**PART I**

<u>CAUSES OF OUTAGE EVENTS – ADJUSTED</u>			
Utility Name: <b>Florida Public Utilities Company- FPUC Total</b>			Year: <b>2016</b>
Cause (a)	Number of Outage Events(N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)
Vegetation	436	78.05	73.06
Animal	354	50.50	73.61
Defective Equipment	163	93.60	103.29
Other Weather	148	147.14	184.79
Lightning	128	82.14	103.39
Unknown	89	74.97	48.25
Other	58	64.89	107.07
Vehicle	26	121.49	89.71
Corrosion	12	102.31	105.08
<b>System Totals FPUC</b>	<b>1414</b>	<b>80.82</b>	<b>95.03</b>

PSC/ECR 102-1(b) (8/06)  
Incorporated by reference in Rule 25-6.0455,  
Florida Administrative Code

## PART II

<u>THREE PERCENT FEEDER LIST – ACTUAL</u>													
Utility Name: <u>Florida Public Utilities Company</u>											Year: <u>2016</u>		
Primary Circuit Id. No. or Name (a)	Sub-station Origin (b)	Location (c)	Number of Customers					Outage Events "N" (i)	Avg Duration "L-Bar" (j)	CAIDI (k)	Listed Last Year? (l)	No. of Years in the Last 5 (m)	Corrective Action Completion Date (n)
			Residential (d)	Commercial (e)	Industrial (f)	Other (g)	Total (h)						
311	Stepdown	Northeast	2354	72	0	0	2426	7	329.27	329.82	YES	1	N/A
9752	Caverns Rd	Northwest	7	41	0	0	48	2	194.87	243.53	NO	1	N/A

PSC/ECR 102-2(a) (8/06)  
 Incorporated by reference in Rule 25-6.0455,  
 Florida Administrative Code

## PART II

<u>THREE PERCENT FEEDER LIST – ADJUSTED</u>													
Utility Name: <u>Florida Public Utilities Company</u>											Year: <u>2016</u>		
Primary Circuit Id. No. or Name (a)	Sub-station Origin (b)	Location (c)	Number of Customers					Outage Events "N" (i)	Avg Duration "L-Bar" (j)	CAIDI (k)	Listed Last Year? (l)	No. of Years in the Last 5 (m)	Corrective Action Completion Date (n)
			Residential (d)	Commercial (e)	Industrial (f)	Other (g)	Total (h)						
311	Stepdown	Northeast	2354	72	0	0	2426	3	91.47	85.04	YES	1	N/A
9752	Caverns Rd	Northwest	7	41	0	0	48	2	194.87	243.53	NO	1	N/A

PSC/ECR 102-2(b) (8/06)  
 Incorporated by reference in Rule 25-6.0455,  
 Florida Administrative Code

### PART III

<u>SYSTEM RELIABILITY INDICES – ACTUAL</u>					
Utility Name: <b>Florida Public Utilities Company</b>				Year: <b>2016</b>	
District or Service Area (a)	SAIDI (b)	CAIDI (c)	SAIFI (d)	MAIFle (e)	CEMI5 (f)
NE Division	2208.00	408.45	5.41	N/A*	N/A*
NW Division	311.81	97.95	3.18	N/A*	N/A*
System Averages	1371.37	309.89	4.43	N/A*	N/A*

\* Total # of Electric Retail Customers is well below 50,000. N/A by Rule 25-6.0455 (3)(c)

PSC/ECR 102-3(a) (8/06)  
 Incorporated by reference in Rule 25-6.0455,  
 Florida Administrative Code

### PART III

<u>SYSTEM RELIABILITY INDICES – ADJUSTED</u>					
Utility Name: <b>Florida Public Utilities Company</b>				Year: <u>2016</u>	
District or Service Area (a)	SAIDI (b)	CAIDI (c)	SAIFI (d)	MAIFle (e)	CEMI5 (f)
NE Division	127.72	90.28	1.41	N/A*	N/A*
NW Division	258.02	98.26	2.63	N/A*	N/A*
System Averages	185.21	95.03	1.95	N/A*	N/A*

\* Total # of Electric Retail Customers is well below 50,000. N/A by Rule 25-6.0455 (3)(c)

PSC/ECR 102-3(b) (8/06)  
 Incorporated by reference in Rule 25-6.0455,  
 Florida Administrative Code



## 2016 - Reliability Indicators By Feeder FPUC – NE (Actual)

Cause	Number of Outage Events (N)	Average Duration (L-Bar)	CAIDI	Sum of all Customer Min. Interrupted (CMI)	Total Customer Interruptions (CI)	Total Outage Duration (L)	SAIDI	SAIFI
102 South Fletcher	89	153.47	136.27	1022707	7505	13659		
110 Plantation Roadside	6	126.30	119.02	3333	28	758		
111 Plantation Fieldside	16	265.09	83.21	172408	2072	4241		
209 Fifteenth Street	47	684.25	102.75	504395	4909	32160		
210 Buss Tie	40	370.73	131.25	482328	3675	14829		
211 Jasmine Street	85	459.80	705.22	4277150	6065	39083		
212 Eleventh Street	61	273.60	442.58	2014629	4552	16690		
214 Clinch Drive	37	424.47	503.10	784337	1559	15705		
310 Bonnieview	49	315.70	667.71	1705341	2554	15469		
311 Bailey	92	329.27	329.82	6664971	20208	30293		
215 Sadler, Nectarine, So.14th	22	364.53	254.04	162589	640	8020		
Chip Mill	4	69.26	69.26	277	4	277		
312	25	1410.17	212.97	56012	263	35254		
AIP	6	529.96	537.63	17558331	32659	3180		
104 Parkway South	1	949.45	949.45	949	1	949		
<b>Totals</b>	<b>580</b>	<b>397.53</b>	<b>408.45</b>	<b>35409756</b>	<b>86694</b>	<b>230567</b>	<b>2208.00</b>	<b>5.41</b>

**Total No. of Customers at end of 2016==>**

**16,037**

## 2016 - Reliability Indicators By Feeder FPUC - NE (Adjusted)

Cause	Number of Outage Events (N)	Average Duration (L-Bar)	CAIDI	Sum of all Customer Min. Interrupted (CMI)	Total Customer Interruptions (CI)	Total Outage Duration (L)	SAIDI	SAIFI
102 South Fletcher	65	81.54	114.77	360044	3137	5300		
110 Plantation Roadside	2	96.83	118.29	2602	22	194		
111 Plantation Fieldside	11	50.48	66.54	134934	2028	555		
209 Fifteenth Street	20	86.09	118.60	379044	3196	1722		
210 Buss Tie	21	117.28	136.69	193285	1414	2463		
211 Jasmine Street	36	72.82	76.68	58197	759	2622		
212 Eleventh Street	36	86.21	32.21	36015	1118	3103		
214 Clinch Drive	23	62.02	39.84	38329	962	1427		
310 Bonnieview	27	74.43	80.27	20390	254	2010		
311 Bailey	42	91.47	85.04	792643	9321	3842		
215 Sadler, Nectarine, So.14th	15	69.86	50.06	11665	233	1048		
Chipmill	4	69.26	69.26	277	4	277		
312	1	87.22	87.22	20845	239	87		
<b>Totals</b>	<b>303</b>	<b>81.35</b>	<b>90.28</b>	<b>2048269</b>	<b>22687</b>	<b>24649</b>	<b>127.72</b>	<b>1.41</b>

Total No. of Customers at end of 2016 ==>

16,037

## 2016 - Reliability Indicators By Feeder FPUC - NW (Actual)

Cause	Number of Outage Events (N)	Average Duration (L-Bar)	CAIDI	Sum of all Customer Min. Interrupted (CMI)	Total Customer Interruptions (CI)	Total Outage Duration (L)	SAIDI	SAIFI
9952 Altha	78	72.56	99.55	244999	2461	5658		
9972 Blountstown	15	81.07	178.16	92109	517	1216		
9882 Bristol	78	70.80	88.93	276497	3109	5522		
9982 College	143	90.74	111.40	364730	3274	12975		
9866 Cottondale	143	76.88	72.96	294839	4041	10993		
9722 Dogwood Hts.	25	56.40	58.81	29639	504	1410		
9782 Family Dollar	4	139.25	224.89	11470	51	557		
9742 Greenwood	135	81.83	119.33	252980	2120	11047		
9872 Hospital	70	83.53	87.56	161724	1847	5847		
9942 Hwy 90 E	78	91.61	98.29	95342	970	7145		
9992 Hwy 90 W	71	86.01	167.76	594546	3544	6107		
9832 Indian Springs	68	88.01	90.92	167477	1842	5984		
9752 Industrial Park	4	194.88	243.54	22406	92	780		
9732 Prison	11	72.17	139.49	9346	67	794		
9512 Railroad	38	76.58	84.67	65279	771	2910		
9854 South Street	185	74.95	71.61	649676	9072	13866		
Marianna Sub	1	102.00	102.00	507960	4980	102		
Altha Sub	1	102.32	102.32	107433	1050	102		
<b>Totals</b>	<b>1148</b>	<b>81.03</b>	<b>97.95</b>	<b>3948451</b>	<b>40312</b>	<b>93018</b>	<b>311.81</b>	<b>3.18</b>

Total No. of Customers at end of 2016==>

12,663

## 2016 - Reliability Indicators By Feeder FPUC - NW (Adjusted)

Cause	Number of Outage Events (N)	Average Duration (L-Bar)	CAIDI	Sum of all Customer Min. Interrupted (CMI)	Total Customer Interruptions (CI)	Total Outage Duration (L)	SAIDI	SAIFI
9952 Altha	76	72.05	99.59	244783	2458	5476		
9972 Blountstown	15	81.07	178.16	92109	517	1216		
9882 Bristol	76	70.77	90.16	275086	3051	5378		
9982 College	139	90.38	112.65	362298	3216	12563		
9866 Cottondale	143	76.88	72.96	294839	4041	10993		
9722 Dogwood Hts.	25	56.40	58.81	29639	504	1410		
9782 Family Dollar	4	139.25	224.89	11470	51	557		
9742 Greenwood	134	78.68	118.42	250460	2115	10543		
9872 Hospital	63	86.44	92.77	150564	1623	5446		
9942 Hwy 90 E	76	91.97	98.38	95031	966	6990		
9992 Hwy 90 W	70	87.06	167.89	594509	3541	6094		
9832 Indian Springs	64	89.39	91.18	167051	1832	5721		
9752 Industrial Park	4	194.88	243.54	22406	92	780		
9732 Prison	11	72.17	139.49	9346	67	794		
9512 Railroad	34	69.88	77.53	54657	705	2376		
9854 South Street	177	75.10	72.36	613065	8472	13292		
<b>Totals</b>	<b>1111</b>	<b>80.67</b>	<b>98.26</b>	<b>3267311</b>	<b>33251</b>	<b>89629</b>	<b>258.02</b>	<b>2.63</b>

Total No. of Customers at end of 2016==>

12,663

## **FPUC 2016 – Reliability Indicators and Analysis**

FPUC's 2016 combined (NE & NW Divisions) reliability indicators when compared to the five year averages are as follows:

- SAIDI up 16.2%
- CAIDI up 4.0%
- SAIFI up 11.5%
- L-BAR down 12.3%

FPUC's reliability indices for SAIDI, CAIDI and SAIFI have increased when compared to the last few years. While FPUC has made significant strides in recent years towards improving its system performance and reliability, reducing outages, and enhancing its ability to respond to service issues, more needs to be done. A combination of aging equipment, increased outages caused by animals, severe storms affecting large areas of our service territory, rural, wet and wooded locations make restoration efforts longer and, in combination with vegetation intrusion, more frequent. FPUC continues to work at mitigating these impacts through ongoing activities such as our storm hardening plan, but we have also begun identifying and planning an even more aggressive approach to complete the projects that will provide FPUC's customers with the service and capability they expect from a 21<sup>st</sup> century electric utility. These identified projects will include activities such as, increased tree trimming, moving feeders currently routed through heavily wooded areas to highway right-of-ways to reduce the outages caused by vegetation, installing insulated covers to equipment bushings and in substations to prevent animal contacts, and replacing older equipment such as transformers, breakers, switches, surge arresters and voltage regulators. Additionally, we have started improving system grounding methods and standardizing new construction standards. We will continue with converting overhead lines to underground when reliability improvements can be achieved.

## **FPUC 2016 – Description of Excluded Events for Named Storms, Transmission, Distribution, and Substations**

### **Named Storms and Tornadoes**

Neither the NE nor NW were impacted by tornadoes during 2016. However, the NE was significantly affected by Hurricane Matthew and slightly affected by Hurricane Hermine and Tropical Storm Julia. The NW was slightly impacted by Hurricane Hermine.

## Transmission and Substation

In 2016 the NE Division experienced a major 69KV transmission outage on January 24 due to a 69KV insulator failure. Crews were dispatched promptly to the site to replace the insulator and customer service was restored in 158 minutes. This outage also affected the Bailey Rd 311 underbuilt feeder as noted in the excluded events table below.

On November 1st and 6th, the NE Division was affected by substation outages to Buss Tie 210 and Eleventh St 212 feeders due to a relay protection failure on 210. While the relay unit was removed for repairs, the two circuits were served from breaker 212. This created substation control issues which prevented the reclosing function to operate properly. Details of the customer outage durations are noted in excluded table below. In all cases FPUC promptly dispatched crews to restore power to customers.

The NW Division experienced one transmission outage and one substation outage, as noted below. On April 2, 2016 a transmission outage occurred during a thunder storm in which lightning hit a transmission potential transformer and locked out the Gulf Power Company 115 KV bus at Marianna Sub. On August 27, 2017 a Gulf Power Company substation outage occurred when the transformer locked out when a City of Blountstown's distribution circuit breaker failed to clear a fault.

All excluded events are contained below in the Excluded Events Tables. The NE and NW Divisions also had several planned outages to perform maintenance to different sections of the distribution system.

2016 NE Division Excluded Events					
Date	Feeder	Exclusion	Aff Cust	L	CMI
1/1/2016	AIP SUB	Planned Outage	5378	15	82552
1/1/2016	AIP SUB	Planned Outage	5378	23	124053
1/24/2016	AIP SUB	Transmission	5378	158	849097
1/24/2016	BAILEY (311)	Transmission	2439	109	265160
1/24/2016	BAILEY (311)	Transmission	12	33	391
1/24/2016	BAILEY (311)	Transmission	244	102	24888
1/24/2016	BAILEY (311)	Transmission	4	322	1286
1/24/2016	BAILEY (311)	Transmission	44	109	4807
1/24/2016	BAILEY (311)	Transmission	155	191	29551
1/25/2016	BAILEY (311)	Planned Outage	7	5	36
2/10/2016	ELEVENTH STREET (212)	Planned Outage	4	106	424
2/15/2016	BAILEY (311)	Planned Outage	1	60	60
2/26/2016	ELEVENTH STREET (212)	Planned Outage	1	14	14
3/7/2016	ELEVENTH STREET (212)	Planned Outage	1	35	35
3/7/2016	ELEVENTH STREET (212)	Planned Outage	1	66	66

4/20/2016	ELEVENTH STREET (210)	Planned Outage	1	198.72	198.72
4/21/2016	FIFTEENTH STREET (209)	Planned Outage	35	7.65	267.75
6/6/2016	SOUTH FLETCHER (102)	Named Storm	7	202	1412
7/21/2016	BONNIEVIEW (310)	Planned Outage	0	0.22	0.00
8/5/2016	BUSS TIE (210)	Planned Outage	0	1	0
9/2/2016	SOUTH FLETCHER (102)	Named Storm	1	88	88
9/2/2016	AIP (315)	Named Storm	5496	71	390949
9/2/2016	BAILEY (311)	Named Storm	2440	239	584136
9/2/2016	JASMINE STREET (211)	Named Storm	1810	4	7542
9/2/2016	JASMINE STREET (211)	Named Storm	770	108	83160
9/2/2016	BONNIEVIEW (310)	Named Storm	10	132	1322
9/2/2016	BUSS TIE (210)	Named Storm	13	43	556
9/2/2016	JASMINE STREET (211)	Named Storm	2	83	165
9/2/2016	BAILEY (311)	Named Storm	91	176	15999
9/2/2016	BAILEY (311)	Named Storm	42	176	7400
9/2/2016	JASMINE STREET (211)	Named Storm	9	46	415
9/2/2016	JASMINE STREET (211)	Named Storm	4	55	220
9/2/2016	BONNIEVIEW (310)	Named Storm	22	120	2650
9/2/2016	PLANTATION ROADSIDE (110)	Named Storm	3	83	249
9/2/2016	SADLER NECTARINE SO.14TH (215)	Named Storm	1	80	80
9/2/2016	ELEVENTH STREET (212)	Named Storm	3	84	252
9/2/2016	ELEVENTH STREET (212)	Named Storm	6	72	430
9/2/2016	BAILEY (311)	Named Storm	6	82	491
9/2/2016	PLANTATION ROADSIDE (110)	Named Storm	1	210	210
9/2/2016	AIP (315)	Named Storm	5496	64	349362
9/2/2016	BAILEY (311)	Named Storm	33	31	1024
9/2/2016	BUSS TIE (210)	Named Storm	7	50	347
9/3/2016	BAILEY (311)	Named Storm	1	79	79
9/13/2016	FIFTEENTH STREET (209)	Named Storm	8	168	1342
9/13/2016	SOUTH FLETCHER (102)	Named Storm	2	303	606
9/14/2016	JASMINE STREET (211)	Named Storm	8	142	1135
9/14/2016	SOUTH FLETCHER (102)	Named Storm	38	340	12909
9/14/2016	SOUTH FLETCHER (102)	Named Storm	30	4	111
9/14/2016	JASMINE STREET (211)	Named Storm	3	15	45
10/5/2016	FIFTEENTH STREET (209)	Named Storm	1499	38	56612
10/5/2016	FIFTEENTH STREET (209)	Named Storm	124	39	4842
10/6/2016	JASMINE STREET (211)	Named Storm	88	65	5727
10/6/2016	SOUTH FLETCHER (102)	Named Storm	1	74	74
10/6/2016	SOUTH FLETCHER (102)	Named Storm	40	71	2839
10/6/2016	AIP (315)	Named Storm	5533	2849	15762318
10/7/2016	BONNIEVIEW (310)	Named Storm	1013	1423	1441347
10/7/2016	BAILEY (311)	Named Storm	2416	1759	4249784
10/7/2016	BUSS TIE (210)	Named Storm	1	1559	1559

10/7/2016	CLINCH DRIVE (214)	Named Storm	546	1280	698935
10/7/2016	BUSS TIE (210)	Named Storm	1	1530	1530
10/7/2016	BUSS TIE (210)	Named Storm	1	1495	1495
10/7/2016	BUSS TIE (210)	Named Storm	1	1494	1494
10/7/2016	JASMINE STREET (211)	Named Storm	1814	1746	3167577
10/7/2016	ELEVENTH STREET (212)	Named Storm	830	1874	1555033
10/7/2016	FIFTEENTH STREET (209)	Named Storm	1	3674	3674
10/7/2016	FIFTEENTH STREET (209)	Named Storm	1	3477	3477
10/7/2016	FIFTEENTH STREET (209)	Named Storm	16	1415	22645
10/7/2016	FIFTEENTH STREET (209)	Named Storm	1	2763	2763
10/7/2016	FIFTEENTH STREET (209)	Named Storm	1	2764	2764
10/7/2016	SADLER NECTARINE SO.14TH (215)	Named Storm	52	1012	52616
10/8/2016	SADLER NECTARINE SO.14TH (215)	Named Storm	1	2681	2681
10/8/2016	312 (312)	Named Storm	1	2949	2949
10/8/2016	SADLER NECTARINE SO.14TH (215)	Named Storm	1	2509	2509
10/8/2016	FIFTEENTH STREET (209)	Named Storm	1	1916	1916
10/8/2016	SADLER NECTARINE SO.14TH (215)	Named Storm	285	282	80313
10/8/2016	CLINCH DRIVE (214)	Named Storm	10	259	2595
10/8/2016	CLINCH DRIVE (214)	Named Storm	16	463	7408
10/8/2016	CLINCH DRIVE (214)	Named Storm	3	1506	4518
10/8/2016	CLINCH DRIVE (214)	Named Storm	2	1863	3726
10/8/2016	CLINCH DRIVE (214)	Named Storm	5	1860	9302
10/8/2016	CLINCH DRIVE (214)	Named Storm	8	1783	14261
10/8/2016	FIFTEENTH STREET (209)	Named Storm	1	1735	1735
10/8/2016	BONNIEVIEW (310)	Named Storm	21	536	11255
10/8/2016	BONNIEVIEW (310)	Named Storm	10	1356	13560
10/8/2016	BONNIEVIEW (310)	Named Storm	5	1380	6902
10/8/2016	BONNIEVIEW (310)	Named Storm	21	1310	27516
10/8/2016	BONNIEVIEW (310)	Named Storm	42	559	23472
10/8/2016	BONNIEVIEW (310)	Named Storm	7	2034	14240
10/8/2016	SADLER NECTARINE SO.14TH (215)	Named Storm	54	181	9772
10/8/2016	SADLER NECTARINE SO.14TH (215)	Named Storm	13	227	2952
10/8/2016	FIFTEENTH STREET (209)	Named Storm	2	1919	3838
10/8/2016	FIFTEENTH STREET (209)	Named Storm	1	3235	3235
10/8/2016	BONNIEVIEW (310)	Named Storm	5	2307	11537
10/8/2016	BAILEY (311)	Named Storm	22	930	20451
10/8/2016	BAILEY (311)	Named Storm	1	1146	1146
10/8/2016	BAILEY (311)	Named Storm	135	1497	202097
10/8/2016	BAILEY (311)	Named Storm	9	2487	22385
10/8/2016	BAILEY (311)	Named Storm	2	2545	5090
10/8/2016	BAILEY (311)	Named Storm	9	2398	21585
10/8/2016	BAILEY (311)	Named Storm	33	2616	86344
10/8/2016	BAILEY (311)	Named Storm	246	188	46187



10/8/2016	SOUTH FLETCHER (102)	Named Storm	1930	1	2284
10/8/2016	SOUTH FLETCHER (102)	Named Storm	1930	179	346081
10/8/2016	PLANTATION FIELDSIDE (111)	Named Storm	12	1525	18297
10/8/2016	CLINCH DRIVE (214)	Named Storm	1	1291	1291
10/8/2016	BUSS TIE (210)	Named Storm	15	1232	18473
10/8/2016	JASMINE STREET (211)	Named Storm	44	819	36023
10/8/2016	JASMINE STREET (211)	Named Storm	28	818	22904
10/8/2016	JASMINE STREET (211)	Named Storm	55	1166	64105
10/8/2016	JASMINE STREET (211)	Named Storm	5	901	4505
10/8/2016	JASMINE STREET (211)	Named Storm	1	901	901
10/8/2016	JASMINE STREET (211)	Named Storm	8	985	7879
10/8/2016	BAILEY (311)	Named Storm	41	1006	41229
10/8/2016	JASMINE STREET (211)	Named Storm	21	984	20655
10/8/2016	JASMINE STREET (211)	Named Storm	67	1162	77852
10/8/2016	JASMINE STREET (211)	Named Storm	13	1162	15101
10/8/2016	JASMINE STREET (211)	Named Storm	260	1160	301648
10/8/2016	JASMINE STREET (211)	Named Storm	1	1326	1326
10/8/2016	JASMINE STREET (211)	Named Storm	26	1326	34464
10/8/2016	JASMINE STREET (211)	Named Storm	2	1324	2648
10/8/2016	JASMINE STREET (211)	Named Storm	84	1580	132759
10/8/2016	JASMINE STREET (211)	Named Storm	6	2255	13531
10/8/2016	JASMINE STREET (211)	Named Storm	147	1324	194589
10/8/2016	312 (312)	Named Storm	1	2229	2229
10/8/2016	PLANTATION FIELDSIDE (111)	Named Storm	15	919	13791
10/8/2016	312 (312)	Named Storm	1	2216	2216
10/8/2016	312 (312)	Named Storm	1	2216	2216
10/8/2016	CLINCH DRIVE (214)	Named Storm	1	1230	1230
10/8/2016	JASMINE STREET (211)	Named Storm	1	1196	1196
10/8/2016	BAILEY (311)	Named Storm	7	1764	12346
10/8/2016	JASMINE STREET (211)	Named Storm	5	1178	5891
10/8/2016	BAILEY (311)	Named Storm	1	1796	1796
10/8/2016	SOUTH FLETCHER (102)	Named Storm	101	25	2535
10/8/2016	SOUTH FLETCHER (102)	Named Storm	25	827	20679
10/8/2016	SOUTH FLETCHER (102)	Named Storm	159	1288	204781
10/8/2016	312 (312)	Named Storm	1	2133	2133
10/8/2016	JASMINE STREET (211)	Named Storm	1	1740	1740
10/8/2016	SOUTH FLETCHER (102)	Named Storm	5	734	3670
10/8/2016	SOUTH FLETCHER (102)	Named Storm	48	681	32694
10/8/2016	312 (312)	Named Storm	1	2105	2105
10/8/2016	BUSS TIE (210)	Named Storm	1	909	909
10/8/2016	ELEVENTH STREET (212)	Named Storm	50	812	40600
10/8/2016	312 (312)	Named Storm	1	2081	2081
10/8/2016	ELEVENTH STREET (212)	Named Storm	26	1211	31483

10/8/2016	ELEVENTH STREET (212)	Named Storm	15	796	11944
10/8/2016	ELEVENTH STREET (212)	Named Storm	18	658	11850
10/8/2016	ELEVENTH STREET (212)	Named Storm	1	1072	1072
10/8/2016	BONNIEVIEW (310)	Named Storm	2	924	1847
10/9/2016	PLANTATION FIELDSDIE (111)	Named Storm	1	643	643
10/9/2016	JASMINE STREET (211)	Named Storm	1	1398	1398
10/9/2016	JASMINE STREET (211)	Named Storm	1	1002	1002
10/9/2016	BUSS TIE (210)	Named Storm	1	240	240
10/9/2016	312 (312)	Named Storm	1	1428	1428
10/9/2016	ELEVENTH STREET (212)	Named Storm	1	1088	1088
10/9/2016	312 (312)	Named Storm	1	1412	1412
10/9/2016	JASMINE STREET (211)	Named Storm	1	1013	1013
10/9/2016	BAILEY (311)	Named Storm	1	884	884
10/9/2016	312 (312)	Named Storm	1	1373	1373
10/9/2016	CLINCH DRIVE (214)	Named Storm	1	1310	1310
10/9/2016	BAILEY (311)	Named Storm	4	946	3785
10/9/2016	SOUTH FLETCHER (102)	Named Storm	15	376	5633
10/9/2016	312 (312)	Named Storm	1	1699	1699
10/9/2016	ELEVENTH STREET (212)	Named Storm	1	917	917
10/9/2016	312 (312)	Named Storm	1	1281	1281
10/9/2016	BONNIEVIEW (310)	Named Storm	1	315	315
10/9/2016	312 (312)	Named Storm	1	1266	1266
10/9/2016	FIFTEENTH STREET (209)	Named Storm	1	1083	1083
10/9/2016	ELEVENTH STREET (212)	Named Storm	1	1303	1303
10/9/2016	CLINCH DRIVE (214)	Named Storm	1	1113	1113
10/9/2016	FIFTEENTH STREET (209)	Named Storm	1	1247	1247
10/9/2016	FIFTEENTH STREET (209)	Named Storm	9	1119	10072
10/9/2016	312 (312)	Named Storm	1	1210	1210
10/9/2016	PLANTATION FIELDSDIE (111)	Named Storm	7	326	2280
10/9/2016	JASMINE STREET (211)	Named Storm	1	806	806
10/9/2016	SOUTH FLETCHER (102)	Named Storm	4	509	2038
10/9/2016	PLANTATION FIELDSDIE (111)	Named Storm	9	274	2464
10/9/2016	BUSS TIE (210)	Named Storm	1	1143	1143
10/9/2016	JASMINE STREET (211)	Named Storm	1	473	473
10/9/2016	FIFTEENTH STREET (209)	Named Storm	1	988	988
10/9/2016	PARKWAY SOUTH (104)	Named Storm	1	949	949
10/9/2016	312 (312)	Named Storm	1	1092	1092
10/9/2016	312 (312)	Named Storm	1	1091	1091
10/9/2016	HWY 90W (9992)	Named Storm	1	80	80
10/9/2016	312 (312)	Named Storm	1	1479	1479
10/9/2016	ELEVENTH STREET (212)	Named Storm	1	1130	1130
10/9/2016	ELEVENTH STREET (212)	Named Storm	1	1066	1066
10/9/2016	BUSS TIE (210)	Named Storm	1	1061	1061

10/9/2016	BUSS TIE (210)	Named Storm	1	228	228
10/9/2016	SOUTH FLETCHER (102)	Named Storm	22	1020	22432
10/9/2016	312 (312)	Named Storm	1	1035	1035
10/9/2016	312 (312)	Named Storm	1	1030	1030
10/9/2016	312 (312)	Named Storm	1	1426	1426
10/9/2016	JASMINE STREET (211)	Named Storm	1	1180	1180
10/9/2016	JASMINE STREET (211)	Named Storm	3	1179	3538
10/9/2016	312 (312)	Named Storm	1	1016	1016
10/9/2016	JASMINE STREET (211)	Named Storm	1	655	655
10/9/2016	PLANTATION ROADSIDE (110)	Named Storm	1	1021	1021
10/9/2016	312 (312)	Named Storm	1	1360	1360
10/9/2016	FIFTEENTH STREET (209)	Named Storm	1	953	953
10/9/2016	FIFTEENTH STREET (209)	Named Storm	1	649	649
10/9/2016	JASMINE STREET (211)	Named Storm	1	627	627
10/9/2016	SOUTH FLETCHER (102)	Named Storm	1	195	195
10/9/2016	ELEVENTH STREET (212)	Named Storm	1	901	901
10/9/2016	BAILEY (311)	Named Storm	1	385	385
10/9/2016	JASMINE STREET (211)	Named Storm	1	842	842
10/9/2016	SOUTH FLETCHER (102)	Named Storm	1	112	112
10/9/2016	SOUTH FLETCHER (102)	Named Storm	1	822	822
10/9/2016	ELEVENTH STREET (212)	Named Storm	0	818	0
10/9/2016	JASMINE STREET (211)	Named Storm	1	813	813
10/9/2016	BUSS TIE (210)	Named Storm	1	693	693
10/10/2016	BONNIEVIEW (310)	Named Storm	1	0	0
10/10/2016	BAILEY (311)	Named Storm	1	331	331
10/10/2016	BAILEY (311)	Named Storm	1	181	181
10/10/2016	BONNIEVIEW (310)	Named Storm	1	252	252
10/10/2016	BAILEY (311)	Named Storm	1	321	321
10/10/2016	FIFTEENTH STREET (209)	Named Storm	1	80	80
10/10/2016	BAILEY (311)	Named Storm	1	206	206
10/10/2016	FIFTEENTH STREET (209)	Named Storm	1	146	146
10/10/2016	BAILEY (311)	Named Storm	1	47	47
10/10/2016	BAILEY (311)	Named Storm	1	103	103
10/10/2016	FIFTEENTH STREET (209)	Named Storm	1	104	104
10/10/2016	ELEVENTH STREET (212)	Named Storm	1	1	1
10/10/2016	BAILEY (311)	Named Storm	1	135	135
10/10/2016	CLINCH DRIVE (214)	Named Storm	1	133	133
10/10/2016	BONNIEVIEW (310)	Named Storm	1	211	211
10/10/2016	BAILEY (311)	Named Storm	1	75	75
10/10/2016	SOUTH FLETCHER (102)	Named Storm	1	259	259
10/10/2016	JASMINE STREET (211)	Named Storm	1	255	255
10/10/2016	ELEVENTH STREET (212)	Named Storm	2	394	787
10/10/2016	CLINCH DRIVE (214)	Named Storm	1	102	102

10/10/2016	JASMINE STREET (211)	Named Storm	1	70	70
10/10/2016	BUSS TIE (210)	Named Storm	1	139	139
10/10/2016	FIFTEENTH STREET (209)	Named Storm	1	124	124
10/10/2016	FIFTEENTH STREET (209)	Named Storm	1	135	135
10/10/2016	312 (312)	Named Storm	1	18	18
10/10/2016	JASMINE STREET (211)	Named Storm	1	107	107
10/10/2016	JASMINE STREET (211)	Named Storm	1	113	113
10/10/2016	BAILEY (311)	Named Storm	1	97	97
10/10/2016	BAILEY (311)	Named Storm	1	68	68
10/10/2016	BAILEY (311)	Named Storm	1	148	148
10/10/2016	JASMINE STREET (211)	Named Storm	1	105	105
10/10/2016	BAILEY (311)	Named Storm	1	58	58
10/10/2016	BAILEY (311)	Named Storm	1	57	57
10/10/2016	JASMINE STREET (211)	Named Storm	1	83	83
10/10/2016	BAILEY (311)	Named Storm	1	60	60
10/10/2016	BAILEY (311)	Named Storm	1	31	31
10/10/2016	BAILEY (311)	Named Storm	1	43	43
10/10/2016	SOUTH FLETCHER (102)	Named Storm	1	52	52
10/10/2016	ELEVENTH STREET (212)	Named Storm	1	63	63
10/10/2016	BAILEY (311)	Named Storm	6	29	173
10/10/2016	BONNIEVIEW (310)	Named Storm	1	19	19
10/10/2016	SOUTH FLETCHER (102)	Named Storm	4	54	215
10/10/2016	FIFTEENTH STREET (209)	Named Storm	1	97	97
10/10/2016	FIFTEENTH STREET (209)	Named Storm	1	99	99
10/10/2016	CLINCH DRIVE (214)	Named Storm	1	85	85
10/10/2016	312 (312)	Named Storm	1	25	25
10/10/2016	JASMINE STREET (211)	Named Storm	1	108	108
10/10/2016	JASMINE STREET (211)	Named Storm	1	29	29
10/10/2016	BONNIEVIEW (310)	Named Storm	1	171	171
10/10/2016	JASMINE STREET (211)	Named Storm	1	29	29
10/10/2016	PLANTATION ROADSIDE (110)	Named Storm	1	76	76
10/10/2016	BONNIEVIEW (310)	Named Storm	1	185	185
10/10/2016	BAILEY (311)	Named Storm	1	159	159
10/10/2016	BAILEY (311)	Named Storm	1	133	133
10/11/2016	ELEVENTH STREET (212)	Named Storm	1	22	22
10/12/2016	BAILEY (311)	Named Storm	1	19	19
10/14/2016	PLANTATION ROADSIDE (110)	Named Storm	1	251	251
11/1/2016	JASMINE STREET (211)	Planned Outage	1	6	6
11/1/2016	BUSS TIE (210)	Substation	738	207	152889
11/1/2016	ELEVENTH STREET (212)	Substation	820	144	118066
11/5/2016	BONNIEVIEW (310)	Named Storm	1	30	30
11/6/2016	BUSS TIE (210)	Substation	738	120	88412
11/6/2016	ELEVENTH STREET (212)	Substation	824	120	98537

11/6/2016	ELEVENTH STREET (212)	Substation	824	125	102835
11/6/2016	BUSS TIE (210)	Substation	738	24	17675
11/8/2016	BONNIEVIEW (310)	Named Storm	1017	117	119057
11/9/2016	BAILEY (311)	Named Storm	2415	91	219081
11/12/2016	BAILEY (311)	Named Storm	1	144	144
11/13/2016	FIFTEENTH STREET (209)	Named Storm	1	349	349
11/13/2016	FIFTEENTH STREET (209)	Named Storm	1	221	221
11/16/2016	PLANTATION ROADSIDE (110)	Planned Outage	1	20	20
11/28/2016	BONNIEVIEW (310)	Planned Outage	117	77	9064

2015 NW Division Excluded Events					
Date	Feeder	Exclusion	Aff Cust	L	CMI
2/23/2016	HWY 90W (9992)	Planned Outage	3	12	37
3/1/2016	RAILROAD (9512)	Planned Outage	7	116	812
3/2/2016	RAILROAD (9512)	Planned Outage	25	227	5675
3/3/2016	RAILROAD (9512)	Planned Outage	24	159	3816
3/3/2016	RAILROAD (9512)	Planned Outage	10	32	319
3/28/2016	INDIAN SPRINGS (9932)	Planned Outage	2	78	156
3/28/2016	HWY 90E (9942)	Planned Outage	2	39	78
4/2/2016	MARIANNA SUB	Transmission	4980	102	507960
4/12/2016	HOSPITAL (9872)	Planned Outage	1	45	45
4/29/2016	HOSPITAL (9872)	Planned Outage	1	55	55
5/24/2016	SOUTH STREET (9854)	Planned Outage	6	82	492
5/26/2016	SOUTH STREET (9854)	Planned Outage	3	11	33
6/7/2016	HOSPITAL (9872)	Planned Outage	16	27	432
6/13/2016	HOSPITAL (9872)	Planned Outage	98	28	2744
6/14/2016	HOSPITAL (9872)	Planned Outage	47	105	4935
6/22/2016	ALTHA (9952)	Planned Outage	2	32	65
6/23/2016	HOSPITAL (9872)	Planned Outage	57	45	2565
6/24/2016	INDIAN SPRINGS (9932)	Planned Outage	2	22	44
6/25/2016	BRISTOL (9882)	Planned Outage	6	132	794
6/27/2016	HOSPITAL (9872)	Planned Outage	4	96	384
7/7/2016	GREENWOOD (9742)	Planned Outage	5	504	2520
7/8/2016	BRISTOL (9882)	Planned Outage	52	12	617
7/12/2016	COLLEGE (9982)	Planned Outage	16	72	1152
8/15/2016	SOUTH STREET (9854)	Planned Outage	373	34	12682
8/15/2016	SOUTH STREET (9854)	Planned Outage	95	90	8550
8/17/2016	SOUTH STREET (9854)	Planned Outage	95	132	12540
8/23/2016	INDIAN SPRINGS (9932)	Planned Outage	5	16	79
8/27/2016	BLOUNTSTOWN SUB	Substation	1050	102	107433
9/2/2016	HWY 90E (9942)	Named Storm	2	116	233

9/2/2016	ALPHA (9952)	Named Storm	1	151	151
10/19/2016	SOUTH STREET (9854)	Planned Outage	10	76	760
10/20/2016	SOUTH STREET (9854)	Planned Outage	12	110	1320
10/21/2016	COLLEGE (9982)	Planned Outage	15	11	165
10/21/2016	COLLEGE (9982)	Planned Outage	24	6	144
10/31/2016	COLLEGE (9982)	Planned Outage	3	324	971
12/27/2016	SOUTH STREET (9854)	Planned Outage	6	39	234
12/27/2016	INDIAN SPRINGS (9932)	Planned Outage	1	147	147

## II. Wood Pole Inspections

### **Introduction**

To comply with FPSC Order No. PSC-06-0144, in 2008 Florida Public Utilities Co. (FPUC) implemented an 8-year cycle wood pole inspection program. The most current edition of the National Electric Safety Code (NESC) serves as a basis for the design of replacement poles for wood poles that fail inspection. Grade 'B' construction, as described in Section 24 of the NESC, has been adopted as the standard of construction for designing new pole installations and the replacement of reject poles in each FPUC Electric Division (NE & NW). Extreme wind loading, as specified in rule 250C and figure 250-2(d) of the NESC, has been adopted. Therefore, 130 mph for the NE Division (Fernandina) and 120 mph for NW Division (Marianna) are used for extreme wind loading.

Wood pole inspections are performed by a qualified wood pole inspection contractor. Inspection results are summarized for each division using the Wood Pole Inspection Reports included in this section. Also included are bar charts and tables that show inspection results summary, failure rates, and pole ages.

The number of inspections may vary from year-to-year based upon a variety of factors. FPUC will complete all required wood pole inspections during the eight year wood pole inspection cycle. In 2016 FPUC began the first year of the second cycle for both divisions.

### **Inspection Process**

The first inspection is a visual inspection to determine if there are any defects that require pole replacement. If the visual inspection indicates that the pole is not suited for continued use, it is rejected by the contractor and reported to FPUC for follow-up.

If the pole passes visual inspection, the pole is sound and bore tested to determine the internal condition of the pole. If the sound and bore inspection indicates that the pole is not suited for continued use, the pole is rejected by the contractor and reported to FPUC for follow-up.

If the pole passes the sound and bore test, the pole is excavated a minimum of 18 inches in depth and tested. If this test indicates the pole is suitable for continued service, the pole is treated and backfilled. If this test indicates the pole is not suited for continued use, it is rejected by the contractor and reported to FPUC for follow-up.

Beginning in 2014, the inspections will be performed with modified criteria for CCA pole inspections. CCA poles less than 21 years of age are visually inspected, sounded, and selectively bored. Boring is performed only if internal decay is suspected. Unless a pole failed sound and bore, a full excavation is not performed on these poles.

### **Strength and Loading Assessment**

The contractor performs Strength Assessment tests on selected poles to compare the current measured circumference to the original circumference of the pole. The effective circumference of the pole is determined to ensure that the current condition of the pole meets the requirements of

NESC Section 26 “Strength Requirements”. Beginning in 2010, pole inspection criteria were enhanced to include LoadCalc, a program used by the contractor to determine pole loading, analysis on poles with remaining strength at or below 67%. If the ‘required’ remaining strength resulting from the combined strength and load analysis indicates that the pole is not suited for continued use, the contractor rejects the pole and reports it to FPUC for follow-up.

Poles having 3<sup>rd</sup> party attachments of ½” or larger in diameter are also assessed for loading with LoadCalc by the contractor. When conducting the Loading Assessment, span lengths, attachment heights, wire sizes, and 3<sup>rd</sup> party attachments are analyzed to estimate pole loading. Poles identified by the contractor as being loaded at or above 100% are re-evaluated by FPUC engineers using a program called PoleForeman. NESC Grade B construction & 60 mph winds provide the basis for calculations. Poles loaded at or above 100% following re-evaluation are replaced. Additional discussion about 3<sup>rd</sup> party attachments is provided in Storm Preparedness Initiatives section under Initiative #2, “Joint Use Pole Attachment Audit”.

### **Post Inspection Follow-Up**

The contractor provides FPUC with follow up reports.

**Poles Needing Maintenance Report:** Maintenance items are provided to FPUC construction employees. The poles are re-inspected and assigned a priority based upon potential hazard to public and employee safety. Repairs are then made in order of priority.

**Reject Poles Report:** FPUC policy is to replace all reject poles in lieu of bracing "restorable" reject poles. Poles are prioritized for replacement using the reject severity level awarded by the inspector as the basis. Each pole is analyzed by FPUC engineers. A computer program called PoleForeman is used to make sure the new poles meet the storm hardening criteria discussed in the first paragraph of this section.

The list of reject poles is provided to 3<sup>rd</sup> party attachers so they may give feedback concerning planned attachments that require increased pole size for added loading.

### **Summary**

FPUC collects and stores pole inspection data upon completion of annual wood pole inspections. The contractor provides FPUC with wood pole inspection data that includes pole location, size, class, test results, and general comments. The contractor provides inspection summary data via an On-line Data Center that allows FPUC to create specific reports and view detailed or summary information. The On-line Data Center is essential for post inspection follow up.

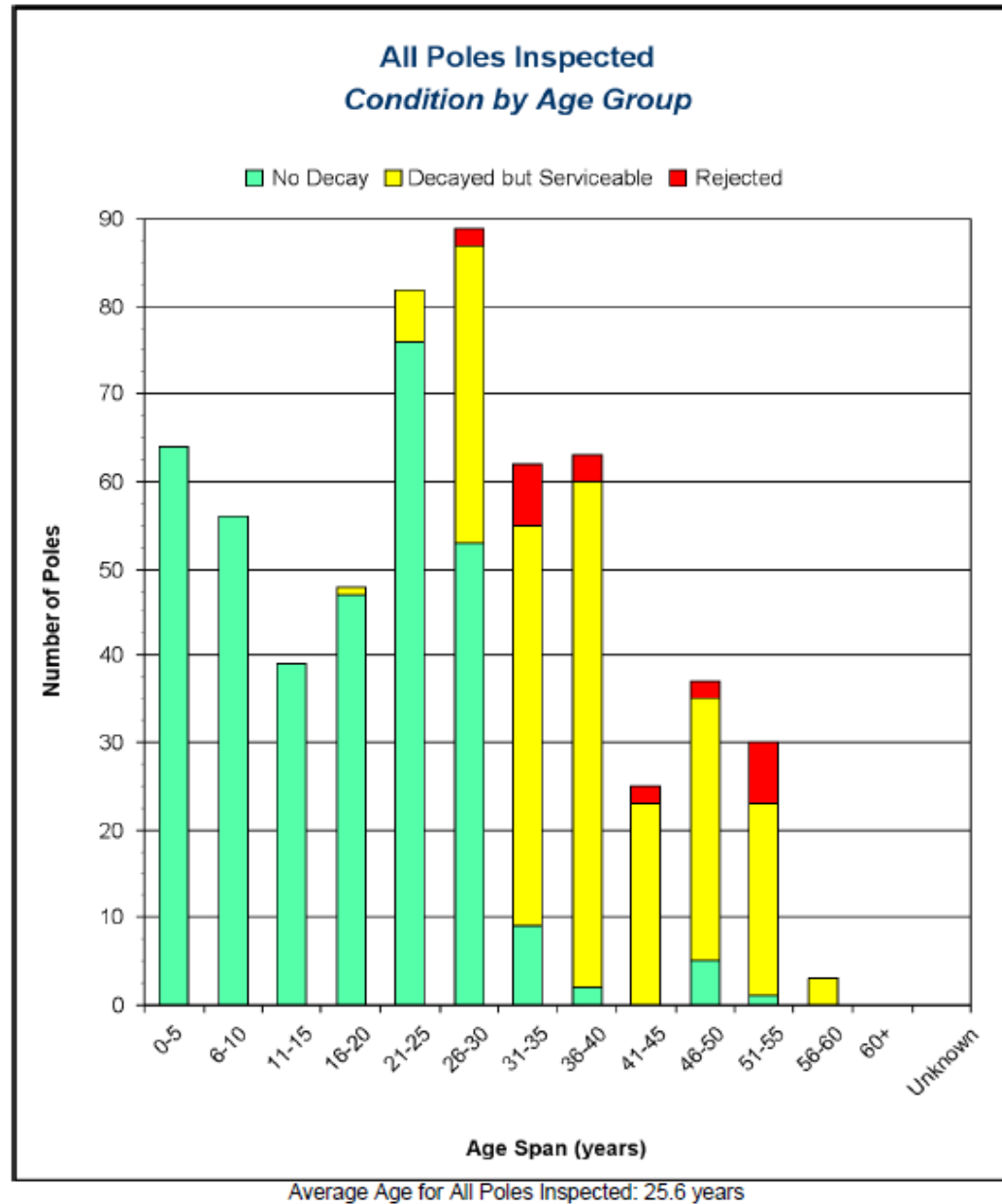
The inspection contractor is required to perform quality control assessments of their work to ensure FPUC pole inspection requirements are being met. The contractor provides documentation that these assessments have taken place.



**Florida Public Utilities Company - NE Division**  
**Annual Wood Pole Inspection Report**  
**Year #1 of 2<sup>nd</sup> 8 Year Cycle**  
**(Inspection Year 2016)**

a	b	C	d	e	f	g	h	i	j	k	l	m	n	o
Total # of wood poles in NE Division	# of pole inspections planned for this year	Backlog included in plans for this year	# of pole inspections completed this year	# of poles failing inspection this year	% failure rate this year	# failures replaced this year	# failures repaired this year	Total # of failures remaining to be replaced	Total # of failures remaining to be repaired	# of poles requiring maint. follow-up this year	# of poles overloaded this year	Total # of poles inspected in 8 yr cycle to date	Total % of poles inspected in 8 yr cycle to date	# of pole inspections planned next year
4998	626	0	598	23	3.84%	12	0	21	0	67	58	598	11.96%	629
If d < b, provide explanation		<p>To determine the number of poles to inspect each year we divide the total number of poles remaining to be inspected by the number of years remaining in the cycle. The number of poles of each feeder varies; therefore, in future inspection years more poles will be inspected than planned since the inspection cycle will include two or more feeders. This was the first year of the second cycle. Circuits 111 and 209 were inspected and contained only 598 poles.</p>												
If g + h < e, provide explanation		<p>We currently have nine poles left to complete. Five poles are in operations awaiting scheduling. Two poles are in engineering and two poles will be replaced by contractors as part of our current S. Fletcher pole and conductor upgrade.</p>												
Additional Information														

## NE Division



## NE Division

### All Poles Inspected Condition by Age Group

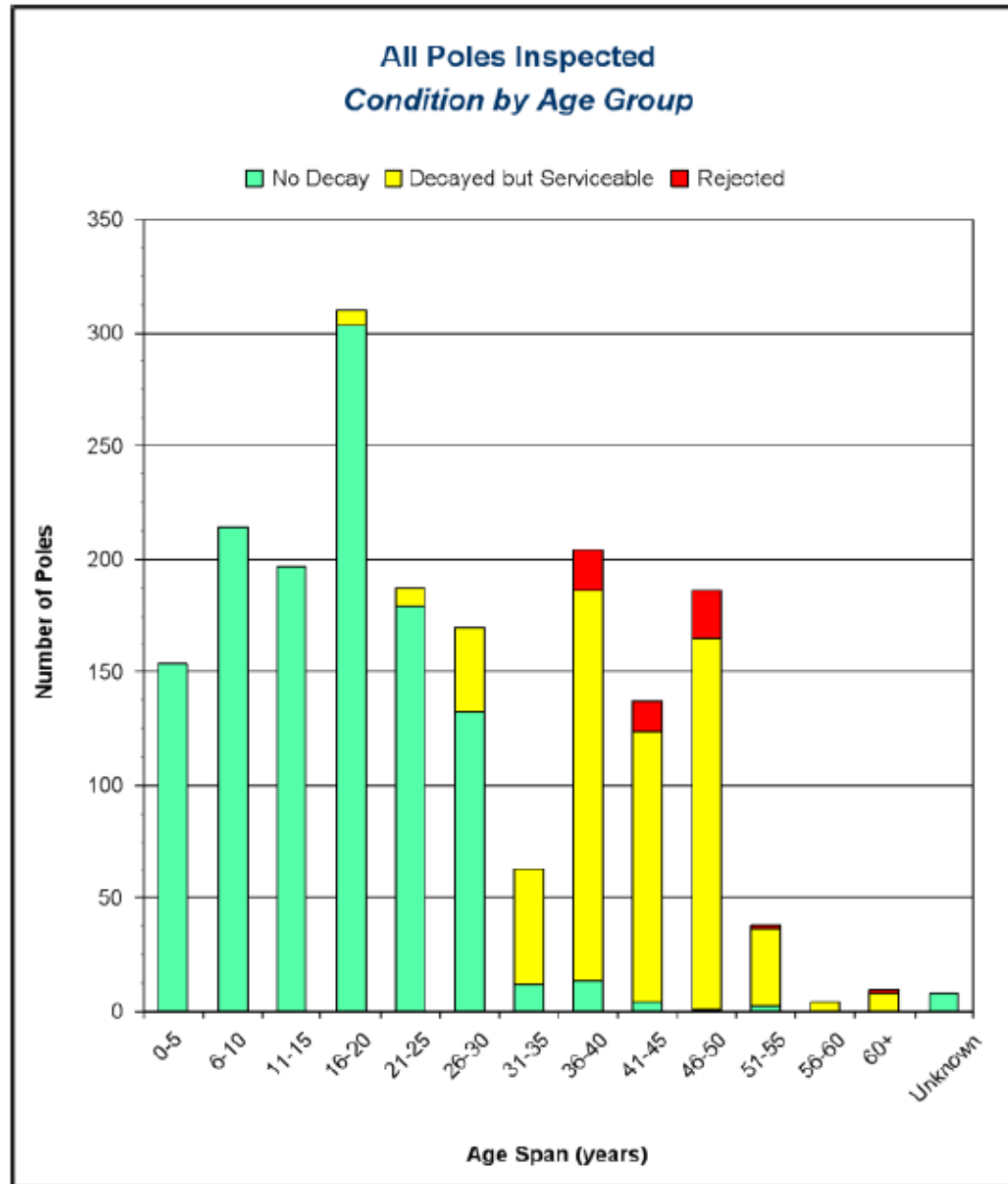
Age Span (years)	No Decay		Decayed but Serviceable					Rejected					Total Poles Inspected	
	Number	%	Internal Decay	External Decay	Other	Number	%	Internal Decay	External Decay	Other	Number	%	Number	%
0-5	64	100%	0	0	0	0	0%	0	0	0	0	0%	64	11%
6-10	56	100%	0	0	0	0	0%	0	0	0	0	0%	56	9%
11-15	39	100%	0	0	0	0	0%	0	0	0	0	0%	39	7%
16-20	47	97.9%	0	1	0	1	2.1%	0	0	0	0	0%	48	8%
21-25	76	92.7%	0	6	0	6	7.3%	0	0	0	0	0%	82	14%
26-30	53	59.6%	0	34	0	34	38.2%	0	2	0	2	2.2%	89	15%
31-35	9	14.5%	0	46	0	46	74.2%	0	7	0	7	11.3%	62	10%
36-40	2	3.2%	0	58	0	58	92.1%	0	3	0	3	4.8%	63	11%
41-45	0	0%	0	23	0	23	92%	0	2	0	2	8%	25	4%
46-50	5	13.5%	0	30	0	30	81.1%	0	2	0	2	5.4%	37	6%
51-55	1	3.3%	0	22	0	22	73.3%	0	7	0	7	23.3%	30	5%
56-60	0	0%	0	3	0	3	100%	0	0	0	0	0%	3	1%
60+	0	0%	0	0	0	0	0%	0	0	0	0	0%	0	0%
Unknown	0	0%	0	0	0	0	0%	0	0	0	0	0%	0	0%
<b>Total</b>	<b>352</b>	<b>58.9%</b>	<b>0</b>	<b>223</b>	<b>0</b>	<b>223</b>	<b>37.3%</b>	<b>0</b>	<b>23</b>	<b>0</b>	<b>23</b>	<b>3.8%</b>	<b>598*</b>	

\* Average Age for All Poles Inspected: 25.6 years

Florida Public Utilities Company - NW Division  
Annual Wood Pole Inspection Report  
Year #1 of 2<sup>nd</sup> 8 year Cycle  
(Inspection Year 2016)

a	b	C	d	e	f	g	h	i	j	k	l	m	n	o
Total # of wood poles in NW Division	# of pole inspections planned for this year	Backlog included in plans for this year	# of pole inspections completed this year	# of poles failing inspection this year	% failure rate this year	# failures replaced this year	# failures repaired this year	Total # of failures remaining to be replaced	Total # of failures remaining to be repaired	# of poles requiring maint. follow-up this year	# of poles overloaded this year	Total # of poles inspected in 8 yr cycle to date	Total % of poles inspected in 8 yr cycle to date	# of pole inspections planned next year
<b>21550</b>	<b>2660</b>	<b>0</b>	<b>1880</b>	<b>55</b>	<b>2.92%</b>	<b>242</b>	<b>0</b>	<b>276</b>	<b>0</b>	<b>587</b>	<b>248</b>	<b>1880</b>	<b>8.72%</b>	<b>2810</b>
If d < b, provide explanation	To determine the number of poles to inspect each year we divide the total number of poles remaining to be inspected by the number of years remaining in the cycle. The number of poles of each feeder varies; therefore, in future inspection years more poles will be inspected than planned since the inspection cycle will include two or more feeders. This was the first year of the second cycle. FPUC inspected the Hwy 90 E Feeder which contained only 1880 poles.													
If g + h < e, provide explanation														
Additional Information														

# NW Division



## NW Division

### All Poles Inspected Condition by Age Group

Age Span (years)	No Decay		Decayed but Serviceable					Rejected					Total Poles Inspected	
	Number	%	Internal Decay	External Decay	Other	Number	%	Internal Decay	External Decay	Other	Number	%	Number	%
0-5	154	100%	0	0	0	0	0%	0	0	0	0	0%	154	8%
6-10	214	100%	0	0	0	0	0%	0	0	0	0	0%	214	11%
11-15	196	100%	0	0	0	0	0%	0	0	0	0	0%	196	10%
16-20	303	97.7%	0	7	0	7	2.3%	0	0	0	0	0%	310	16%
21-25	179	95.7%	0	8	0	8	4.3%	0	0	0	0	0%	187	10%
26-30	132	77.6%	0	38	0	38	22.4%	0	0	0	0	0%	170	9%
31-35	12	10%	0	51	0	51	81%	0	0	0	0	0%	63	3%
36-40	13	6.4%	0	173	0	173	84.8%	0	18	0	18	8.8%	204	11%
41-45	4	2.9%	0	120	0	120	87.6%	0	13	0	13	9.5%	137	7%
46-50	1	0.5%	0	164	0	164	88.2%	0	20	1	21	11.3%	186	10%
51-55	2	5.3%	0	34	0	34	89.5%	0	2	0	2	5.3%	38	2%
56-60	0	0%	0	4	0	4	100%	0	0	0	0	0%	4	0%
60+	0	0%	0	8	0	8	88.9%	0	0	1	1	11.1%	9	0%
Unknown	8	100%	0	0	0	0	0%	0	0	0	0	0%	8	0%
<b>Total</b>	<b>1218</b>	<b>64.8%</b>	<b>0</b>	<b>607</b>	<b>0</b>	<b>607</b>	<b>32.3%</b>	<b>0</b>	<b>53</b>	<b>2</b>	<b>55</b>	<b>2.9%</b>	<b>1880*</b>	

\* Average Age for All Poles Inspected: 24.9 years

# III. Storm Hardening Update

## **Introduction**

This is the required annual update of the FPUC Storm Hardening Plan. Wood pole inspection is addressed in more detail in Section II of this update. More extensive updates for the ten storm preparedness initiatives can be found in Section IV.

## **Compliance with NESC Requirements:**

The National Electric Safety Code (NESC) serves as a basis for the design and construction of new and replacement FPUC facilities. Pursuant to subsection 25-6.0345 (2), F.A.C., all FPUC facilities were installed in accordance with NESC requirements in effect at the time of their installation. To enhance FPUC storm hardening efforts, more stringent Grade ‘B’ construction, as described in Section 24 of the 2012 edition of the NESC, has been adopted as the standard for the design and installation of all future new and replacement poles in each FPUC Electric Division (NE & NW).

## **Extreme Wind Loading:**

Extreme wind loading, as specified in rule 250C and figure 250-2(d) of the 2012 edition of the NESC, has been adopted, as follows: 130 mph wind speed for wind loading in NE Division (Fernandina), and 120 mph wind speed for wind loading in NW Division (Marianna).

## **Mitigation of Damage Due to Storm Surge and Flooding:**

FPUC continues to develop specifications for mitigating damage to underground and overhead distribution and transmission facilities caused by flooding and storm surges. Additionally, FPUC is participating along with other investor owned, cooperative, and municipal electric utilities in the Public Utility Research Center (PURC) research regarding hurricane winds and storm surge within the state.

FPUC transmission facilities are located in the Northeast (Florida) Division only. Transmission lines constructed near and across coastal waterways were originally designed to meet, at a minimum, NESC requirements for those applications. Where necessary, foundations and casings were used to stabilize the structures due to the soil conditions.

Some overhead distribution lines in both divisions are subject to storm surges and flooding. Lines located near the coast or inland waterways that are subject to storm surges or flooding are continually evaluated. Additional supporting mechanisms are installed when practicable. This includes storm guys or pole bracing, as needed. Storm guys or bracing are being placed so that additional support is achieved perpendicular to the distribution line. Potentially affected lines that have reclosers, capacitors, or regulators that require electronic controls have associated controls mounted above maximum anticipated surge or flood levels.

Underground distribution lines subject to potential storm surges and flooding are mainly located in Northeast Florida Division. Storm hardening specifications include the use of reinforced concrete pads with legs on each corner that are poured approximately two feet into the ground to provide additional stability. Equipment is securely attached to the pad. Underground distribution

lines are placed in conduit but are not typically encased in concrete. Future installations of underground distribution feeders will be evaluated based upon potential exposure to storm surges and flooding. Additional information and conclusions from research performed by the PURC will be included in the evaluation. If it is determined that storm surges could cause excessive damage, the installation may be encased in concrete ducts if feasible and validated by research.

### **Placement of New and Replacement Facilities:**

Accessible locations are necessary for the efficient and safe installation and maintenance of FPUC facilities. Therefore, facilities are placed along public rights of way or located on private easements that are readily accessible from public streets. Placement of facilities along rear lot lines will not occur except in certain commercial applications where easily accessible concrete or asphalt driveways are located at the rear of the development or in residential neighborhoods with alleyways designed specifically for the purpose of installing utility services behind homes.

### **Deployment Strategy:**

FPUC has a fully implemented storm hardening strategy. Significant areas of note for 2016 include:

1. During 2016, each division completed the first year of the second, eight year cycle wood pole inspection program. Specific results are reported in Section II - Wood Pole Inspections.
2. FPUC continues its Vegetation Management Program that includes trimming main feeders every three years, laterals every six years, and addressing danger trees as soon as possible. Additional information about the FPUC Vegetation Management Program can be found in Section IV - Storm Preparedness Initiatives, Initiative #1 - Vegetation Management Program for Distribution Circuits.
3. Pole loading inspections and follow up are performed annually in both divisions as part of the Wood Pole Inspection Program. More information about pole loading inspections and follow up can be found in Section II - Wood Pole Inspections, and Section IV - Storm Preparedness Initiatives, Initiative #2 - Joint Use Pole Attachment Audit.
4. FPUC owned transmission poles are only located in the NE Division. Details about climbing inspections of transmission poles can be found in Section IV - Storm Preparedness Initiatives, Initiative #3 - Six Year Transmission Structure Inspection Program.
5. Section IV - Storm Preparedness Initiatives, Initiative #4 - Storm Hardening of Existing Transmission Structures contains additional information about transmission structure storm hardening.
6. New underground facilities are designed to mitigate damage from storm surges and flooding.
7. FPUC will continue to place facilities on public rights of way and, if this is not possible, will secure private easements to make sure facilities are easily accessible.
8. Performed joint use audit during the last quarter of 2016. Results of the audit are contained in Initiative #2.

### **Communities and Areas Affected by Electric Infrastructure Improvements:**

The majority of the items listed in the deployment strategy affect all areas of the FPUC electric service territory. The intent is to make sure both divisions benefit from these strategies. Transmission inspection and transmission storm hardening programs only affect the Northeast Florida Division since there are no FPUC owned transmission facilities in the Northwest Florida



Division at this time. Constructing distribution lines to comply with the NESC extreme wind loading standards is beneficial to both divisions and the communities they serve.

### **Upgrading of Joint Use Facilities**

Both the NE and NW Divisions have continued to replace reject poles. Many of these reject poles have joint use attachments. New replacement poles were designed to accommodate joint use facilities and were installed in accordance with criteria found in the current addition of NESC guidelines for extreme wind loading conditions. The new installations were coordinated with joint users. During 2016, 12 reject poles were replaced in the NE Division, and 242 reject poles were replaced in the NW Division.

## IV. Storm Preparedness Initiatives

This is the FPUC required annual update of the ten storm preparedness initiatives.

### **Initiative #1 - Vegetation Management Programs for Distribution Circuits**

FPUC continues to work towards the accomplishment of a three year vegetation management cycle on main feeders and a six year vegetation management cycle on laterals on the system.

The program includes the following:

1. Three year vegetation management cycle on all main feeders.
2. Six year vegetation management cycle on all laterals.
3. Increased participation with local governments to address improved overall reliability due to tree related outages.
4. Information made available to customers regarding the maintenance and placement of trees.

Based upon current tree trimming crew levels, the Company will make reasonable efforts to address the following:

1. Annual inspection of main feeders to critical infrastructure prior to the storm season to identify and perform the necessary trimming.
2. Address danger trees located outside the normal trim zone and located near main feeders as reported.

Performance Metrics: Adjusted data includes only activities that are budgeted and included in the Company's filed vegetation management plan. Unadjusted (actual) data includes all performance data, such as, hurricane performance and all other vegetation caused outage events FPUC believes to be excludable pursuant to 25-6.0455, F.A.C. The difference between unadjusted data and adjusted data are the storm reliability performance metrics.

In 2014 FPUC initiated a new cycle of its 3 year feeder and 6 year lateral vegetation management program. Data from completed and future cycles will be analyzed to see if there are opportunities for improvements.

## FPUC Consolidated Vegetation Management Performance Metrics – 2016

	Feeders			Laterals		
	Unadjusted	Adjusted	Diff.	Unadjusted	Adjusted	Diff.
<b>(A) Number of Outages</b>	3	3	0	433	433	0
<b>(B) Customer Interruptions</b>	3984	3984	0	14814	14814	0
<b>(C) Miles Cleared</b>	61.64	61.64	0	188.38	188.38	0
<b>(D) Remaining Miles (Note 1, 2 &amp; 3)</b>	-5.04	-5.04	0	102.62	102.62	0
<b>(E) Outages per Mile [A ÷ (C + D)]</b>	0.05	0.05	0.00	1.49	1.49	0.00
<b>(F) Vegetation CI per Mile [B ÷ (C + D)]</b>	70.39	70.39	0.00	50.91	50.91	0.00
<b>(G) Number of Hotspot trims</b>	468	468	0	NA	NA	NA
<b>(H) All Vegetation Management Costs</b>	\$957,079	\$957,079	0	(Note 4)	(Note 4)	(Note 4)
<b>(I) Customer Minutes of Interruption</b>	223,467	223,467	0	1,150,008	1,150,008	0
<b>(J) Outage restoration costs</b>	(Note 5)	(Note 5)	0	NA	NA	NA
<b>(K) Vegetation Budget (current year)</b>	\$934,300	\$934,300	\$-	NA	NA	NA
<b>(L) Vegetation Goal (current year)</b>	\$934,300	\$934,300	\$-	NA	NA	NA
<b>(M) Vegetation Budget (next year)</b>	\$996,900	\$996,900	\$-	NA	NA	NA
<b>(N) Vegetation Goal (next year)</b>	\$996,900	\$996,900	\$-	NA	NA	NA
<b>(O) Trim-Back Distance</b>	(Note 6)	(Note 6)	0	(Note 6)	(Note 6)	NA

### Danger Trees (FPUC Totals) – Additional Questions

- a) Number of danger trees removed? 1075
- b) Expenditures on danger tree removal? \$200,000 (Estimated)
- c) Number of request for removals that were denied? 0
- d) Avoided CI with danger trees removed (estimate)? N/A
- e) Avoided CMI with danger trees removed (estimate)? N/A

Note 1: Miles cleared in 2016 include total miles of main feeders and laterals and hot spot trimming.

Note 2: NE and NW Division uses GIS system to obtain miles of feeders and laterals.

Note 3: Remaining miles negative numbers indicate additional trimming beyond the required 3 and 6 year cycles.

Note 4: Vegetation management costs have not been separated between main feeders and laterals.

Note 5: Outage restoration costs have not been historically documented.

Note 6: Distribution is 10 feet and transmission (138KV is 30 feet and 69KV is 15 feet)

## NE Division Vegetation Management Performance Metrics - 2016

	Feeders			Laterals		
	Unadjusted	Adjusted	Diff.	Unadjusted	Adjusted	Diff.
<b>(A) Number of Outages</b>	1	1	0	52	52	0
<b>(B) Customer Interruptions</b>	2458	2458	0	1660	1660	0
<b>(C) Miles Cleared (Notes 1 &amp; 2)</b>	20.82	20.82	0	27.11	27.11	0
<b>(D) Remaining Miles (Note 2 &amp; 3)</b>	-23.37	-23.37	0	-2.74	-2.74	0
<b>(E) Outages per Mile [A ÷ (C + D)]</b>	0.05	0.05	0	2.13	2.13	0
<b>(F) Vegetation CI per Mile [B ÷ (C + D)]</b>	134.54	134.54	0	68.11	68.11	0
<b>(G) Number of Hotspot trims</b>	242	242	0	NA	NA	NA
<b>(H) All Vegetation Management Costs</b>	\$262,195	\$262,195	0	(Note 4)	(Note 4)	(Note 4)
<b>i(I) Customer Minutes of Interruption</b>	135,681	135,681	0	157,508	157,508	0
<b>(J) Outage restoration costs</b>	(Note 5)	(Note 5)	NA	NA	NA	NA
<b>(K) Vegetation Budget (current year)</b>	\$252,000	\$252,000	\$-	NA	NA	NA
<b>(L) Vegetation Goal (current year)</b>	\$252,000	\$252,000	\$-	NA	NA	NA
<b>(M) Vegetation Budget (next year)</b>	\$315,900	\$315,900	\$-	NA	NA	NA
<b>(N) Vegetation Goal (next year)</b>	\$315,900	\$315,900	\$-	NA	NA	NA
<b>(O) Trim-Back Distance</b>	(Note 6)	(Note 6)	0	(Note 6)	(Note 6)	NA

### Danger Trees (NE Division) – Additional Questions

- a) Number of danger trees removed? 453
- b) Expenditures on danger tree removal? 100,000 (estimated)
- c) Number of request for removals that were denied? 0
- d) Avoided CI with danger trees removed (estimate)? N/A
- e) Avoided CMI with danger trees removed (estimate)? N/A

Note 1: Miles cleared in 2016 include total miles of main feeders and laterals and hot spot trimming.

Note 2: NE Division uses GIS system to obtain miles of feeders and laterals.

Note 3: Remaining miles negative numbers indicate additional trimming beyond the required 3 and 6 year cycles.

Note 4: Vegetation management costs have not been separated between main feeders and laterals.

Note 5: Outage restoration costs have not been historically documented.

Note 6: Distribution is 10 feet and transmission (138KV is 30 feet and 69KV is 15 feet)

## NW Division Vegetation Management Performance Metrics – 2016

	Feeders			Laterals		
	Unadjusted	Adjusted	Diff.	Unadjusted	Adjusted	Diff.
<b>(A) Number of Outages</b>	2	2	0	381	381	0
<b>(B) Customer Interruptions</b>	1526	1526	0	13154	13154	0
<b>(C) Miles Cleared (note 1 &amp; 2)</b>	40.82	40.82	0	161.27	161.27	0
<b>(D) Remaining Miles</b>	18.33	18.33	0	105.36	105.36	0
<b>(E) Outages per Mile [A ÷ (C + D)]</b>	0.034	0.034	0	1.43	1.43	0
<b>(F) Vegetation CI per Mile [B ÷ (C + D)]</b>	25.8	25.8	0	49.33	49.33	0
<b>(G) Number of Hotspot trims</b>	226	226	0	NA	NA	NA
<b>(H) All Vegetation Management Costs</b>	\$694,884	\$694,884	0	(Note 4)	(Note 4)	
<b>(I) Customer Minutes of Interruption</b>	87,786	87,786	0	992,500	992,500	0
<b>(J) Outage restoration costs</b>	(Note 5)	(Note 5)	NA	NA	NA	NA
<b>(K) Vegetation Budget (current year)</b>	\$682,300	\$682,300	0	NA	NA	NA
<b>(L) Vegetation Goal (current year)</b>	\$682,300	\$682,300	0	NA	NA	NA
<b>(M) Vegetation Budget (next year)</b>	\$681,000	\$681,000	0	NA	NA	NA
<b>(N) Vegetation Goal (next year)</b>	\$681,000	\$681,000	0	NA	NA	NA
<b>(O) Trim-Back Distance</b>	10	10	NA	10	10	NA

### Danger Trees (NW Division) – Additional Questions

- a) Number of danger trees removed? 622
- b) Expenditures on danger tree removal? \$100,000 (Estimated)
- c) Number of request for removals that were denied? 0
- d) Avoided CI with danger trees removed (estimate)? N/A
- e) Avoided CMI with danger trees removed (estimate)? N/A

Note 1: Miles cleared in 2016 include total miles of main feeders and laterals and hot spot trimming.

Note 2: NW Division uses GIS system to obtain miles of feeders and laterals.

Note 4: Vegetation management costs have not been separated between main feeders and laterals.

Note 5: Outage restoration costs have not been historically documented.

**NW TREE TRIM SCHEDULE – MAIN FEEDERS  
2015 – 2017**

- 2015**
1. OCB#9932: Indian Springs Feeder
  2. OCB#9854: South Street Feeder
  3. OCB#9512: Railroad Feeder
  4. OCB#9872: Hospital Feeder
  5. OCB#9752: Industrial Park Feeder
  6. OCB#9866: Cottondale Feeder
- 2016**
1. OCB#9742: Greenwood/Malone Feeder
  2. OCB#9722: Dogwood Heights Feeder
  3. OCB#9982: College Feeder
  4. OCB#9732: Prison Feeder
  5. OCB#9782: Family Dollar Feeder
- 2017**
1. OCB#9942: HWY 90E Feeder
  2. OCB#9992: HWY 90W Feeder
  3. OCB#9972: Blountstown Feeder
  4. OCB#9882: Bristol Feeder
  5. OCB# 9952: Altha Feeder

**NW TREE TRIM SCHEDULE – LATERALS  
2015 – 2020**

- 2015**
1. OCB#9512: Railroad Feeder
  2. OCB#9872: Hospital Feeder
  3. OCB#9866: Cottondale Feeder
- 2016**
1. OCB#9722: Dogwood Heights Feeder
  2. OCB#9982: College Feeder
- 2017**
1. OCB#9752: Industrial Park Feeder
  2. OCB#9742: Greenwood/Malone Feeder
  3. OCB#9782: Family Dollar Feeder
- 2018**
1. OCB#9992: HWY 90W Feeder
  2. OCB#9854: South Street Feeder
  3. OCB#9732: Prison Feeder
- 2019**
1. OCB#9972: Blountstown Feeder
  2. OCB# 9952: Altha Feeder
- 2020**
1. OCB#9942: HWY 90E Feeder
  2. OCB#9882: Bristol Feeder
  3. OCB#9932: Indian Springs Feeder

**NE DIVISION - TREE TRIM SCHEDULE – Main Feeders  
2015 – 2017**

- 2015**
1. Feeder#201(69KV)
  2. Feeder#202 (69KV)
  3. Feeder#802(138KV)
  4. Feeder#803(138KV)
  5. Feeder#211
  6. Feeder#215
  7. Feeder#209

- 2016**
1. Feeder#310
  2. Feeder#311
  3. Feeder#315 (69KV)
  
  4. Feeder#102
  5. Feeder#210
  6. Feeder#313 (69KV)

- 2017**
1. Feeder#104
  2. Feeder#110
  3. Feeder#111
  4. Feeder#212
  5. Feeder#214

**NE DIVISION - TREE TRIM SCHEDULE – Laterals  
2015 – 2020**

- 2015**
1. Feeder#110
  2. Feeder#111

- 2016**
1. Feeder#209
  2. Feeder#214

- 2017**
1. Feeder#211
  2. Feeder#215

- 2018**
1. Feeder#310
  2. Feeder#210

- 2019**
1. Feeder#102
  2. Feeder#311

- 2020**
1. Feeder#104
  2. Feeder#212

## FPUC NE Division - D&T Vegetation Management\*

Feeder #	Main Feeder		Feeder Laterals		Main Feeder		Feeder Laterals		TOTALS	
	OH (feet)	UG (feet)	OH (feet)	UG (feet)	OH (miles)	UG (miles)	OH (miles)	UG (miles)	OH (miles)	UG (miles)
312	0.00	8,620	0.00	200	0.00	1.63	0.00	0.04	0.00	1.67
311	27,672	260	52,529	95,681	5.24	0.05	9.95	18.12	15.19	18.17
310	16,080	1,485	32,580	51,837	3.05	0.28	6.17	9.82	9.22	10.10
209	25,423	1,062	22,253	37,236	4.81	0.20	4.21	7.05	9.03	7.25
210	9,990	2,245	27,961	6,700	1.89	0.43	5.30	1.27	7.19	1.69
211	13,992	225	60,222	23,852	2.65	0.04	11.41	4.52	14.06	4.56
212	17,477	110	55,966	8,505	3.31	0.02	10.60	1.61	13.91	1.63
214	14,935	305	22,435	3,491	2.83	0.06	4.25	0.66	7.08	0.72
215	11,264	1,250	14,549	38,850	2.13	0.24	2.76	7.36	4.89	7.59
102	19,249	2,207	37,931	114,746	3.65	0.42	7.18	21.73	10.83	22.15
104	1,438	6,799	0	51,595	0.27	1.29	0.00	9.77	0.27	11.06
110	10,292	0	7,762	163,381	1.95	0.00	1.47	30.94	3.42	30.94
111	10,354	6,020	7,990	90,453	1.96	1.14	1.51	17.13	3.47	18.27
<b>Dist. Totals</b>	<b>178,166</b>	<b>30,588</b>	<b>342,178</b>	<b>686,527</b>	<b>33.74</b>	<b>5.79</b>	<b>64.81</b>	<b>130.02</b>	<b>98.55</b>	<b>135.82</b>
<b>69KV Line</b>									<b>11.45</b>	
<b>138KV Line</b>									<b>8.02</b>	
<b>D&amp;T Totals</b>	<b>178,166</b>	<b>30,588</b>	<b>342,178</b>	<b>686,527</b>	<b>33.74</b>	<b>5.79</b>	<b>64.81</b>	<b>130.02</b>	<b>118.02</b>	<b>135.82</b>

\* Basis for tracking and managing 2014 and future tree trimming cycles (3 yr. mains and 6 yr. laterals) - Data source is GIS mapping system.

Updated 5/7/2014



## 2016 FPUC NE Division - D&T Vegetation Management\*\*

Feeder #	Main Feeder		Feeder Laterals		Main Feeder		Feeder Laterals		TOTALS	
	OH (feet)	UG (feet)	OH (feet)	UG (feet)	OH (miles)	UG (miles)	OH (miles)	UG (miles)	OH (miles)	UG (miles)
311	5,650	0	25,150	0	1.07	0.00	4.76	0.00	5.83	0.00
310	14,850	0	11,350	0	2.81	0.00	2.15	0.00	4.96	0.00
209	0	0	100	0	0.00	0.00	0.02	0.00	0.02	0.00
210	80	0	1,610	0	0.02	0.00	0.30	0.00	0.32	0.00
211	23,885	0	53,470	0	4.52	0.00	10.13	0.00	14.65	0.00
212	27,550	0	8,650	0	5.22	0.00	1.64	0.00	6.86	0.00
214	430	0	680	0	0.08	0.00	0.13	0.00	0.21	0.00
215	5,050	0	2,490	0	0.96	0.00	0.47	0.00	1.43	0.00
102	24,700	0	19,590	0	4.68	0.00	3.71	0.00	8.39	0.00
104	300	0	550	0	0.06	0.00	0.10	0.00	0.16	0.00
110	6,550	0	6,000	0	1.24	0.00	1.14	0.00	2.38	0.00
111	900	0	13,500	0	0.17	0.00	2.56	0.00	2.73	0.00
<b>Dist. Totals</b>	<b>109,945</b>	<b>0</b>	<b>143,140</b>	<b>0</b>	<b>20.82</b>	<b>0.00</b>	<b>27.11</b>	<b>0.00</b>	<b>47.93</b>	<b>0.00</b>
<b>69KV Line</b>	16,800	0	0	0	3.18	0	0	0	0	0
<b>138KV Line</b>	100	0	0	0	0.02	0	0	0	0	0
<b>D&amp;T Totals</b>	<b>126,845</b>		<b>143,140</b>		<b>24.2</b>		<b>27.11</b>		<b>51.11</b>	

\*\* 2016 Trim Totals

## FPUC NW Division - D&T Vegetation Management\*

Feeder #	Main Feeder		Feeder Laterals		Main Feeder		Feeder Laterals		TOTALS	
	OH (feet)	UG (feet)	OH (feet)	UG (feet)	OH (miles)	UG (miles)	OH (miles)	UG (miles)	OH (miles)	UG (miles)
9742 G-wood/ Malone	35,842	0	286,273	6,503	6.79	0.00	54.22	1.23	61.01	1.23
9722 Dogwood Heights	22,492	0	57,530	2,901	4.26	0.00	10.90	0.55	15.16	0.55
9982 College	70,950	0	214,562	32,034	13.44	0.00	40.64	6.07	54.07	6.07
9932 Indian Springs	30,117	181	139,043	40,744	5.70	0.03	26.33	7.72	32.04	7.75
9732 Prison	16,950	0	13,228	17,887	3.21	0.00	2.51	3.39	5.72	3.39
9942 Hwy 90E	59,479	0	269,335	23,186	11.26	0.00	51.01	4.39	62.28	4.39
9992 Hwy 90W	15,096	0	57,021	2,313	2.86	0.00	10.80	0.44	13.66	0.44
9854 South Street	38,708	0	480,975	21,409	7.33	0.00	91.09	4.05	98.42	4.05
9882 Bristol	60,005	0	224,028	5,931	11.36	0.00	42.43	1.12	53.79	1.12
9872 Family Dollar	16,275	365	3,633	2,817	3.08	0.07	0.69	0.53	3.77	0.60
9866 Cottondale	61,890	0	360,787	9,690	11.72	0.00	68.33	1.84	80.05	1.84
9952 Altha	24,266	0	242,986	2,544	4.60	0.00	46.02	0.48	50.62	0.48
9972 Blountstown	32,921	0	40,024	2,275	6.24	0.00	7.58	0.43	13.82	0.43
9512 Railroad	41,919	0	83,137	8,420	7.94	0.00	15.75	1.59	23.68	1.59
9872 Hospital	13,609	0	196,454	2,744	2.58	0.00	37.21	0.52	39.78	0.52
9752 Industrial Park	18,616	0	2,990	1,230	3.52	0.00	0.57	0.23	4.09	0.23
<b>Dist. Totals</b>	<b>559,135</b>	<b>546</b>	<b>2,672,006</b>	<b>182,628</b>	<b>105.89</b>	<b>0.10</b>	<b>506.06</b>	<b>34.59</b>	<b>611.95</b>	<b>34.69</b>

\* Basis for tracking and managing 2014 and future tree trimming cycles (3 yr. mains and 6 yr. laterals) - Data source is GIS mapping system.

Updated 5/7/2014

## 2016 FPUC NW Division - D&T Vegetation Management\*\*

Feeder #	Main Feeder		Feeder Laterals		Main Feeder		Feeder Laterals		TOTALS	
	OH (feet)	UG (feet)	OH (feet)	UG (feet)	OH (miles)	UG (miles)	OH (miles)	UG (miles)	OH (miles)	UG (miles)
90E	25,928	0	106,526	0	4.91	0.00	20.18	0.00	25.09	0.00
90W	8,750	0	39,631	0	1.66	0.00	7.51	0.00	9.16	0.00
Altha	24,508	0	132,450	0	4.64	0.00	25.09	0.00	29.73	0.00
Blountstown	32,179	0	40,684	0	6.09	0.00	7.71	0.00	13.80	0.00
Bristol	55,229	0	58,064	0	10.46	0.00	11.00	0.00	21.46	0.00
College	28,226	0	24,961	0	5.35	0.00	4.73	0.00	10.07	0.00
Cottondale	4,132	0	104,680	0	0.78	0.00	19.83	0.00	20.61	0.00
Dogwood	8,004	0	2,366	0	1.52	0.00	0.45	0.00	1.96	0.00
Hospital	0	0	34,125	0	0.00	0.00	6.46	0.00	6.46	0.00
Indian Springs	0	0	12,140	0	0.00	0.00	2.30	0.00	2.30	0.00
Malone	21,004	0	164,169	0	3.98	0.00	31.09	0.00	35.07	0.00
Railroad	0	0	1,415	0	0.00	0.00	0.27	0.00	0.27	0.00
South St	0	0	124,363	0	0.00	0.00	23.55	0.00	23.55	0.00
Family Dollar	237	0	0	0	0.04	0.00	0.00	0.00	0.04	0.00
Prison	7,314	0	5,911	0	1.39	0.00	1.12	0.00	2.50	0.00
Industrial Pk	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
<b>Dist. Totals</b>	<b>215,511</b>	<b>0</b>	<b>851,485</b>	<b>0</b>	<b>40.82</b>	<b>0</b>	<b>161.27</b>	<b>0</b>	<b>202.08</b>	<b>0</b>

\*\* 2016 Trim Totals

## 2016 - FPUC Feeder Specific Data for Attached Laterals (Vegetation Related)

Feeder	Division	Feeder Type	Main Feeder		Feeder Laterals		TOTALS		Feeder Lateral CI	Feeder Lateral CMI	Feeder Circuit Looped?	Feeder Events N
			OH (miles)	UG (miles)	OH (miles)	UG (miles)	OH (miles)	UG (miles)				
102 SOUTH FLETCHER	NE	Hybrid	3.7	0.55	6.92	20.62	10.62	21.17	126	1170	Yes	11
111 PLANTATION RD	NE	Hybrid	1.96	1.14	1.51	17.13	3.47	18.27	909	97869	Yes	1
209 FIFTEENTH ST	NE	Hybrid	4.81	0.2	4.21	7.05	9.03	4.25	6	823	Yes	2
210 BUSS TIE	NE	Hybrid	2.03	0.32	4.76	0.98	6.79	1.3	42	1648	Yes	4
211 JASMINE STREET	NE	Hybrid	2.88	0	11.28	4.59	14.16	4.59	315	19085	Yes	9
212 ELEVENTH STREET	NE	Hybrid	3.29	0	10.7	1.84	13.99	1.84	23	2849	Yes	3
214 CLINCH DRIVE	NE	Hybrid	2.89	0	4.78	1.28	7.67	1.28	33	2640	Yes	7
215 SADLER RD	NE	Hybrid	2.71	0	1.92	7.58	4.63	7.58	2	156	Yes	2
310 BONNIEVIEW	NE	Hybrid	3.39	0.18	7.85	6.75	11.24	6.93	80	11530	Yes	7
311 BAILEY	NE	Hybrid	6.19	0	9.0	19.4	15.19	19.4	320	6679	Yes	6
9952 ALTHA	NW	Hybrid	4.6	0	46.3	0.54	50.9	0.54	696	51963	No	17
9972 BLOUNTSTOWN	NW	Hybrid	6.27	0	7.55	0.43	13.82	0.43	7	507	Yes	2
9882 BRISTOL	NW	Hybrid	11.52	0	42.5	1.12	54.02	1.12	1170	42492	No	14
9982 COLLEGE	NW	Hybrid	13.44	0	40.43	6.91	53.87	6.91	1118	86965	Yes	60
9866 COTTONDALE	NW	Hybrid	11.72	0	68.09	1.84	79.81	1.84	697	54840	No	52
9722 DOGWOOD HT	NW	Hybrid	4.26	0	11.04	0.55	15.3	0.55	34	1782	Yes	7
9782 FAMILY DOLLAR	NW	Hybrid	3.08	0.07	0.69	0.53	3.77	0.6	1	44	Yes	1
9742 GREENWOOD	NW	Hybrid	10.59	0	50.13	1.4	60.72	1.4	1039	100297	No	43
9872 HOSPITAL	NW	Hybrid	2.58	0	37.27	0.47	39.85	0.47	656	40834	Yes	29
9942 HWY 90E	NW	Hybrid	11.26	0	51.19	4.39	62.45	4.39	407	34329	No	33
9992 HWY 90W	NW	Hybrid	4.44	0.11	11.42	0.34	15.86	0.45	692	57357	Yes	10
9932 INDIAN SPR	NW	Hybrid	5.7	0.03	26.5	7.83	32.2	7.86	1170	67633	No	25
9732 PRISON	NW	Hybrid	3.21	0	2.51	3.39	5.72	3.39	3	101	No	1
9512 RAILROAD	NW	Hybrid	6.45	0	9.9	1.55	16.35	1.55	152	7851	Yes	11
9854 SOUTH ST	NW	Hybrid	7.19	0	100.05	4.22	107.24	4.22	5312	445506	Yes	76
<b>TOTALS</b>			<b>135.26</b>	<b>2.69</b>	<b>564.01</b>	<b>146.95</b>	<b>699.27</b>	<b>149.64</b>	<b>18798</b>	<b>1,373,476</b>		<b>436</b>

## **Initiative #2 – Joint Use Pole Attachment Audit**

FPUC has joint use agreements with multiple telecommunication and cable television providers. Some of the current agreements needed additional language to add or clarify joint use audit and safety inspection instructions. Both CATV and Telco agreements were rewritten during 2014 to standardize language and to include clearly defined requirements for joint use pole attachment audits and safety inspections. During December 2014, new agreements were mailed to the CATV companies. Telco agreements expired on 12/31/2015 and had a requirement of 12 month advance notice of intent to terminate and replace the agreements. The Telco termination notices were delivered during December 2014. To establish pole ownership, both the new CATV and Telco agreements make provision for an initial joint use pole attachment audit to take place within 12 months of the effective date, upon request of the owner or licensee, and on a five year recurring cycle after the first audit. In addition, the CATV agreements make provision, at the sole discretion of the owner, for a joint safety inspection to take place subsequent to the inventory audit within 2 years of the agreement effective date, and recurring inspections on a five year cycle following the initial safety inspection. The agreements are subject to negotiation and the terms and timing are subject to change.

Currently Southern Light, Fairpoint Communications, Crown Castle and Brighthouse Network agreements have been executed. AT&T has elected to stay with the current agreement and focus on a negotiated amendment, for which the process will begin during 2017. Joint use agreement negotiations are ongoing, and in varying stages of completion with CenturyLink and Comcast. All agreement should be in place and executed during 2017.

FPUC completed the joint use pole attachment audit during the last quarter of 2016. The total cost for the audit was \$82,670.30. FPUC will be working with each joint user to recover their corresponding portion of the total cost of the audit. The pole count for each joint user has been adjusted using the following table of audit results.

<b>Joint Use Attacher</b>	<b># of Poles Attached to FPU</b>	<b># of Poles FPU Attached</b>
<b>AT&amp;T</b>	3139	496
<b>BrightHouse</b>	952	0
<b>Century Link</b>	2347	5
<b>Comcast NE</b>	3565	0
<b>Comcast NW</b>	8977	0
<b>Crown Castle</b>	47	0
<b>Fairpoint</b>	255	12
<b>Southern Light</b>	339	0

### Initiative #3 – Six Year Transmission Structure Inspection Program

Transmission inspections will be completed on all transmission facilities and will include climbing patrols of the 138 KV and 69 KV transmission lines owned by FPUC. This inspection will ensure that all structures have a detailed inspection performed at a minimum of every six years. The inspection will include ninety five (95) 138 KV structures and two hundred seventeen (217) 69 KV structures. The inspections will ensure that all transmission towers and other transmission line supporting equipment such as insulators, guying, grounding, conductor splicing, cross-braces, cross-arms, bolts, etc. structurally sound and firmly attached. Customers who own 69 KV transmission line structures connected to FPUC will be strongly encouraged to complete a similar type inspection. In addition to the six year climbing inspections mentioned above, wood transmission poles are also included in the 8 year wood pole ground-line condition inspection and treatment program.

Substation equipment will also be inspected annually to document the integrity of the facility and identify any deficiencies that require action. Substations will be inspected to ensure that all structures, buss work, insulators, grounding, bracing, bolts, etc. are structurally sound and firmly attached.

Transmission Circuit, Substation and Other Equipment Inspections

	Activity		Current Budget**		Next Year	
	Goal	Actual	Budget	Actual	Goal	Budget
(A) Total transmission circuits.	<u>19.5</u>	<u>19.5</u>	<u>NA</u>	<u>NA</u>	<u>19.5</u>	<u>NA</u>
(B) Planned transmission circuit inspections ***	<u>19.5</u>	<u>19.5</u>	<u>NA</u>	<u>NA</u>	<u>19.5</u>	<u>NA</u>
(C) Completed transmission circuit *** inspections.	<u>19.5</u>	<u>19.5</u>	<u>NA</u>	<u>NA</u>	<u>19.5</u>	<u>NA</u>
(D) Percent of transmission circuit inspections completed. *	<u>100%</u>	<u>100%</u>	<u>NA</u>	<u>NA</u>	<u>100%</u>	<u>NA</u>
(E) Planned transmission substation inspections *.	<u>4</u>	<u>4</u>	<u>NA</u>	<u>NA</u>	<u>4</u>	<u>NA</u>
(F) Completed transmission substation * inspections.	<u>4</u>	<u>4</u>	<u>NA</u>	<u>NA</u>	<u>4</u>	<u>NA</u>
(G) Percent transmission substation inspections completed.*	<u>100%</u>	<u>100%</u>	<u>NA</u>	<u>NA</u>	<u>100%</u>	<u>NA</u>
(H) Planned transmission equipment inspections (other equipment).	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
(I) Completed transmission equipment inspections (other equipment).	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
(J) Percent of transmission equipment inspections completed (other equipment).	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>

\* Inspections performed were visual

\*\* Current accounting system does not provide data to this level

\*\*\* 6 yr. climbing inspection completed in 2012

### Transmission Tower Structure Inspections

	Activity		Current Budget**		Next Year	
	Goal	Actual	Budget	Actual	Goal	Budget
(A) Total transmission tower structures.	4	4	<u>NA</u>	<u>NA</u>	4	<u>NA</u>
(B) Planned transmission tower structure Inspections *	<u>4</u>	<u>4</u>	<u>NA</u>	<u>NA</u>	<u>4</u>	<u>NA</u>
(C) Completed transmission tower structure inspections. *	<u>4</u>	<u>4</u>	<u>NA</u>	<u>NA</u>	<u>4</u>	<u>NA</u>
(D) Percent of transmission tower structure inspections completed.	<u>100%</u>	<u>100%</u>	<u>NA</u>	<u>NA</u>	<u>100%</u>	<u>NA</u>

\* 6 yr. climbing inspection completed in 2012

\*\* Current accounting system does not provide data to this level

### Transmission Pole Inspections

	Activity		Current Budget		Next Year	
	Goal	Actual	Budget	Actual	Goal	Budget
(A) Total number of transmission poles. * **	308	308	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
(B) Number of transmission poles strength tested.	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
(C) Number of transmission poles passing strength test.	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
(D) Number of transmission poles failing strength test (overloaded).	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
(E) Number of transmission poles failing strength test (other reasons).	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
(F) Number of transmission poles corrected (strength failure).	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
(G) Number of transmission poles corrected (other reasons).	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
(H) Total transmission poles replaced.	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>

\*FPUC includes wood transmission poles in the eight year ground-line condition inspection and treatment program.

\*\* 6 yr. climbing inspection completed in 2012

## **Initiative #4 – Storm Hardening of Existing Transmission Structures**

NE Division’s 138 KV transmission system was constructed using concrete poles, steel poles, and steel towers. The construction generally complies with storm hardening requirements. The structures will continue to be inspected as outlined in Initiative #3 - Six Year Transmission Structure Inspection Program - to ensure the integrity of the system.

The 69 KV transmission system consists of a total of 217 poles of which 105 are concrete, seven are wood span guys and 105 are wood structures. All installations met the NESC code requirements in effect at the time of construction. A policy of replacing existing wood poles with concrete structures has been in place for some time. This policy requires that when it becomes necessary to replace a wood pole, due to construction requirements or concerns with the integrity of the pole, a concrete pole that meets current NESC codes and storm hardening requirements will be utilized.

The above quantity of 69KV structures reflects work that FPUC performed during 2016. This work entailed the installation of 31 new 69KV spun concrete structures of which 28 were replacements of existing wood poles and the other 3 structures were new additions to the 69KV transmission system. All structures were designed to be able to withstand extreme wind loadings of 130 mph.

NW Division currently has no transmission structures.

**Hardening of Existing Transmission Structures**

	Activity		Current Budget		Next Year	
	Goal	Actual	Budget	Actual*	Goal	Budget
(A) Transmission structures scheduled for hardening.	<b>4</b>	<b>8</b>	<b>\$200,000</b>	<b>\$496,000</b>	<b>13</b>	<b>\$650,000</b>
(B) Transmission structures hardening completed.	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
(C) Percent transmission structures hardening completed.	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

\* Approximate costs



## **Initiative #5 – Geographic Information System**

FPUC utilizes GIS mapping for both divisions. The systems are ESRI based using ArcGIS to identify the distribution and/or transmission facilities overlaid on a GIS land base. The systems locate the facilities on the land base and allow the users to enter data updates for all existing or new physical assets within the system. The system has proven to be a reliable and valuable tool for the engineering of new construction or existing system maintenance projects.

The system also interfaces with the Customer Information System to function as a Customer Outage Management System (OMS). Implementation of the OMS has resulted in significant improvement in data collection and retrieval capability for analyzing and reporting reliability indices.

The GIS is being used as an integral part of the data collection for many of the programs mentioned in this update. The information, now available in the GIS, is instrumental in conducting pole inspections and joint use audits. In addition, the OMS will serve as a valuable tool for use in post storm forensic analysis.

In 2013 FPUC completed the upgrade and installation of a new GIS mapping system which has integrated multiple utility systems (gas, electric, propane, etc.) into one system. The migration of data began in 2012 and was completed by the end of 2013. In addition, a new and improved version of the OMS system was also installed in 2013. In 2014 FPU began using the new OMS which provided several enhancements that have proven to be beneficial for managing outages. A key feature of the new OMS is the automatic notification of outages to managers, supervisors and employees via text and/or email.

During 2016 FPUC successfully implemented an OMS enhancement which enabled dispatching of outages directly to the crews via an iPad application. In addition, FPUC continues with its plan to implement automatic logging of customer outage calls into the OMS. Plans are currently exploring the implementation of a contractor hosted solution in 2017 to avoid issues with incompatible phone systems.

## **Initiative #6 - Post-Storm Data Collection and Forensic Analysis**

FPUC has established a forensics oversight team to coordinate communications, schedule data collection activities, and final reporting requirements. Our plans are to utilize a consultant, Osrose Utility Services, or teams from Southeastern Electric Exchange (SEE) Members to collect, analyze, and report on field data collected which will be entered into the FPUC Outage Management System (OMS). FPUC will utilize reporting forms for submitting forensic data to the FPSC.

The following is the latest version of the FPUC “FORENSIC DATA COLLECTION AND REPORTING” procedure:

### **FORENSIC DATA COLLECTION AND REPORTING**

#### **PURPOSE:**

To set standards and responsibilities for the collection, assessment, and reporting of storm related damage to FPUC transmission, substation, and distribution structures and equipment. To accomplish these tasks in an orderly manner, safely, and with a minimum of interference with the process of system restoration following a storm.

#### **PROCESS:**

A minimum of 72 hours prior to the storm; FPU will initiate the forensic process by alerting team members both in-house and external of the impending event. All contact information will be verified for accuracy and all equipment will be checked to make sure it is in good working order.

48 hours prior to the storm; begin the process of accessing where the storm is most likely to strike and determine the best locations for forensic teams. Inform team members of more specific information as it becomes available.

24 hours prior to the storm; notify all team members of actual crew personnel, mobilization plan, safety procedures, and reporting instructions.

After the storm; perform a forensic investigation at each location encountered that meets reportable criteria. Damage locations to include, but are not limited to poles, wires, crossarms, insulators, transformers, reclosers, capacitor banks, cutouts, any other equipment that is damaged or has caused a customer outage.

Damage areas will be determined and teams dispatched utilizing FPU’s outage management system, reports from customers, and reports from restoration crews.

**RESPONSIBILITIES:**

An FPUC Forensic Team Leader will be assigned and will be responsible for managing the overall forensic effort. This will include tracking storm progress, coordinating team deployment, communication with local Operations Centers, review findings, and generating final reports.

Florida Public Utilities Company will utilize Osmose Utility Services or Southeastern Electric Exchange (SEE) Member Teams to provide forensic investigative teams that will be responsible for safely collecting information on storm damage. Damaged facilities are defined as broken poles, leaning poles, broken or downed wires, damaged line equipment, and any other incident that has caused a customer outage.

**REPORTING:**

All post storm forensic data collected will be entered in standard forms. The form allows both overhead and underground damage to be entered and data must be entered separately for each incident. Pictures of damages from multiple views will be taken and included for clarity and additional assessment.

## **Initiative #7 – Reliability Performance of Overhead vs Underground Systems**

FPUC collects outage data attributed to overhead or underground equipment failure in order to evaluate the associated reliability indices. OH & UG adjusted reliability indices are reported for each Division and for FPUC system total.

During 2016 there were no projects converting OH to UG on FPUC's system.

## 2016 - Reliability Indicators By UG & OH - FPUC Total (Adjusted)

Construction	Number of Outage Events (N)	Average Duration (L-Bar)	CAIDI	Sum of all Customer Min. Interrupted (CMI)	Total Customer Interruptions (CI)	Total Outage Duration (L)	SAIDI	SAIFI
OH	1369	79.85	93.58	4977780	53190	109309		
UG	45	110.41	122.93	337800	2748	4968		
<b>Total</b>	<b>1414</b>	<b>80.82</b>	<b>95.03</b>	<b>5315580</b>	<b>55938</b>	<b>114278</b>	<b>185.21</b>	<b>1.95</b>

Total # of Customers at end of 2016 ==>

28,700

### 2016 - OH Reliability by Feeder - FPUC NE (Adjusted)

FEEDER	Outage Events (N)	Ave. Duration (L Bar)	CAIDI	Customer Min. Interrupted (CMI)	Customer Interruptions (CI)	Outage Duration (L)	SAIDI	SAIFI
SOUTH FLETCHER (102)	53	76.96	97.78	97295	995	4079		
PLANTATION FIELDSIDE (111)	10	51.89	66.68	134569	2018	519		
FIFTEENTH STREET (209)	19	83.14	118.59	378902	3195	1580		
BUSS TIE (210)	17	107.70	130.59	147303	1128	1831		
JASMINE STREET (211)	34	70.07	76.58	57898	756	2382		
ELEVENTH STREET (212)	35	85.12	32.05	35767	1116	2979		
CLINCH DRIVE (214)	23	62.02	39.84	38329	962	1427		
BONNIEVIEW (310)	24	70.11	79.93	20063	251	1683		
BAILEY (311)	37	92.76	85.04	792234	9316	3432		
SADLER (215)	14	64.96	48.12	10972	228	909		
CHIPMILL	3	78.17	78.17	235	3	235		
<b>TOTAL</b>	<b>269</b>	<b>78.27</b>	<b>85.82</b>	<b>1713566</b>	<b>19968</b>	<b>21055</b>	<b>106.85</b>	<b>1.25</b>

**Total # of NE Customers in 2016:**

**16,037**

### 2016 - UG Reliability by Feeder - FPUC NE (Adjusted)

FEEDER	Outage Events (N)	Ave. Duration (L Bar)	CAIDI	Customer Min. Interrupted (CMI)	Customer Interruptions (CI)	Outage Duration (L)	SAIDI	SAIFI
SOUTH FLETCHER (102)	12	101.77	122.67	262749	2142	1221		
PLANTATION ROADSIDE (110)	2	96.83	118.29	2602	22	194		
PLANTATION FIELDSIDE (111)	1	36.45	36.45	365	10	36		
FIFTEENTH STREET (209)	1	142.00	142.00	142	1	142		
BUSS TIE (210)	4	157.98	160.78	45982	286	632		
JASMINE STREET (211)	2	119.66	99.64	299	3	239		
ELEVENTH STREET (212)	1	124.17	124.17	248	2	124		
BONNIEVIEW (310)	3	108.93	108.93	327	3	327		
BAILEY (311)	5	81.91	81.91	410	5	410		
SADLER NECTARINE SO.14TH (215)	1	138.50	138.50	693	5	139		
CHIPMILL	1	42.55	42.55	43	1	43		
312 (312)	1	87.22	87.22	20845	239	87		
<b>TOTAL</b>	<b>34</b>	<b>105.69</b>	<b>123.10</b>	<b>334703</b>	<b>2719</b>	<b>3593</b>	<b>20.87</b>	<b>0.17</b>

Total # of NE Customers in 2016:

16,037

### 2016 - OH Reliability by Feeder - FPUC NW (Adjusted)

FEEDER	Outage Events (N)	Ave. Duration (L Bar)	CAIDI	Customer Min. Interrupted (CMI)	Customer Interruptions (CI)	Outage Duration (L)	SAIDI	SAIFI
ALTHA (9952)	75	70.56	99.52	244416	2456	5292		
BLOUNTSTOWN (9972)	14	81.89	178.79	91900	514	1146		
BRISTOL (9882)	74	67.33	90.09	274690	3049	4982		
COLLEGE (9982)	138	90.62	112.67	362241	3215	12506		
COTTONDALE (9866)	142	75.87	72.93	294619	4040	10773		
DOGWOOD HEIGHTS (9722)	25	56.40	58.81	29639	504	1410		
FAMILY DOLLAR (9782)	4	139.25	224.89	11470	51	557		
GREENWOOD (9742)	134	78.68	118.42	250460	2115	10543		
HOSPITAL (9872)	63	86.44	92.77	150564	1623	5446		
HWY 90E (9942)	76	91.97	98.38	95031	966	6990		
HWY 90W (9992)	69	87.01	167.91	594418	3540	6004		
INDIAN SPRINGS (9932)	63	89.96	91.21	166997	1831	5668		
INDUSTRIAL PARK (9752)	3	208.83	244.53	22253	91	627		
PRISON (9732)	10	73.59	140.72	9288	66	736		
RAILROAD (9512)	34	69.88	77.53	54657	705	2376		
SOUTH STREET (9854)	176	74.99	72.32	611573	8456	13199		
<b>TOTAL</b>	<b>1100</b>	<b>80.23</b>	<b>98.25</b>	<b>3264214</b>	<b>33222</b>	<b>88254</b>	<b>257.78</b>	<b>2.62</b>

**Total # of NW Customers in 2016:**

**12,663**



### 2016 - UG Reliability by Feeder - FPUC NW (Adjusted)

FEEDER	Outage Events (N)	Ave. Duration (L Bar)	CAIDI	Customer Min. Interrupted (CMI)	Customer Interruptions (CI)	Outage Duration (L)	SAIDI	SAIFI
ALTHA (9952)	1	183.75	183.75	368	2	184		
BLOUNTSTOWN (9972)	1	69.67	69.67	209	3	70		
BRISTOL (9882)	2	198.01	198.01	396	2	396		
COLLEGE (9982)	1	57.00	57.00	57	1	57		
COTTONDALE (9866)	1	220.00	220.00	220	1	220		
HWY 90W (9992)	1	53.53	53.53	91	1	91		
INDIAN SPRINGS (9932)	1	53.53	53.53	54	1	54		
INDUSTRIAL PARK (9752)	1	153.00	153.00	153	1	153		
PRISON (9732)	1	58.00	58.00	58	1	58		
SOUTH STREET (9854)	1	93.28	93.28	1493	16	93		
<b>TOTAL</b>	<b>11</b>	<b>124.99</b>	<b>106.80</b>	<b>3097</b>	<b>29</b>	<b>1375</b>	<b>0.24</b>	<b>0.00</b>

# of NW Customers in 2016:

12,663

## **Initiative #8 – Utility Company Coordination with Local Governments**

FPUC actively participates with local governments in pre-planning for emergency situations and in coordinating activities during emergency situations. Current practice is to have FPUC personnel located at the county EOC's on a 24 hour basis during emergency situations to ensure good communications.

FPUC has continued involvement with local governments regarding reliability issues with emphasis on both undergrounding and vegetation management. All parties have continued to cooperate in order to address vegetation management issues in a cost effective manner when possible so that overall reliability impacts are minimized.

FPUC has a dedicated Manager of Government Relations in each of the Northwest and Northeast service territories that are responsible for maintaining relationships with local and state government officials/staff, business and community leaders. They also respond quickly to customer issues referred by elected and governmental officials and their representatives.

## **Initiative #9 – Collaborative Research**

FPUC is participating with the Public Utility Research Center (PURC) along with other investor owned, cooperative, and municipal electric utilities in order to perform beneficial research regarding hurricane winds and storm surge within the state. PURC has demonstrated the ability to lead and coordinate multiple groups in research activities. FPUC will continue to support this effort but does not intend to conduct any additional research at this time.

The benefits of the research work among the utilities and PURC include increased and sustained collaboration and discussion among the members of the Steering Committee, greater knowledge of the determinants of damage during storm and non-storm times, greater knowledge and data from wind collection stations and post-hurricane forensics in the State of Florida, and continued state-to-state collaboration with others in the Atlantic Basin Hurricane Zone.

The 2017 report follows on the next page.

# Report on Collaborative Research for Hurricane Hardening

Provided by

The Public Utility Research Center  
University of Florida

To the

Utility Sponsor Steering Committee

February 2017

## I. Introduction

The Florida Public Service Commission (FPSC) issued Order No. PSC-06-00351-PAA-EI on April 25, 2006 (Order 06-0351) directing each investor-owned electric utility (IOU) to establish a plan that increases collaborative research to further the development of storm resilient electric utility infrastructure and technologies that reduce storm restoration costs and outages to customers. This order directed IOUs to solicit participation from municipal electric utilities and rural electric cooperatives in addition to available educational and research organizations. As a means of accomplishing this task, the IOUs joined with the municipal electric utilities and rural electric cooperatives in the state (collectively referred to as the Project Sponsors) to form a Steering Committee of representatives from each utility and entered into a Memorandum of Understanding (MOU) with the University of Florida's Public Utility Research Center (PURC). The third extension of this MOU was approved last year by the Research Collaboration Partners and now extends through December 31, 2018.

PURC manages the work flow and communications, develops work plans, serves as a subject matter expert, conducts research, facilitates the hiring of experts, coordinates with research vendors, advises the Project Sponsors, and provides reports for Project activities. The collaborative research has focused on undergrounding, vegetation management, hurricane-wind speeds at granular levels, and improved materials for distribution facilities.

This report provides an update on the activities of the Steering Committee since the previous report dated February 2016.

## **II. Steering Committee Workshop**

On September 29, the Steering Committee organized a workshop for 26 participants from the Project Sponsors at TECO Plaza in Tampa. The workshop was held to orient new members on the work that the cooperative has accomplished, and to serve as a forum for new ideas in the field of storm preparedness and outage response.

The opening speaker was Matt Corey from Weatherflow, Inc. who discussed their wind monitoring network “HurrNet.” The network consists of approximately 90 wind monitoring stations, 44 in Florida, and 21 on utility property. This data is available at no charge to the Project Sponsors. He also outlined Weatherflow’s new capabilities, specifically their StormTrack/StormPrint model (on which he displayed, ironically, Hurricane Matthew) and their new line of Smart Weather weather stations for domestic to commercial users.

Next was Ted Kury from PURC with an update on the undergrounding model developed by the Project Sponsors. The current capabilities, which include both probabilistic and deterministic modeling, were reviewed.

The next item on the agenda was a roundtable on vegetation management. Participants discussed current procedures and best practices. All noted that utilities continue to face challenges regarding access to facilities that need to be managed, particularly within municipal boundaries due primarily to municipal codes. Some noted that municipalities may not be aware of the impact that their codes may have on system reliability, and that education is critical in these areas. Each utility then outlined their current trim cycle and approach. Finally, the participants discussed the evolution of customer expectations regarding communications with their utilities.

Next on the agenda was a discussion on the collection and usage of forensic storm damage data. Participants reviewed the existing platform and data framework.

Finally, the participants engaged in a roundtable discussion of topics that might be explored further in future workshops, and discussed the importance and the form of follow-up efforts.

Overall, the participants left the workshop with a greater appreciation and understanding of the work conducted at the various transmission and distribution segments of the Florida utilities.

## **III. Undergrounding**

The collaborative research on undergrounding has been focused on understanding the existing research on the economics and effects of hardening strategies, including undergrounding, so that informed decisions can be made about undergrounding policies and specific undergrounding projects.

The collaborative has refined the computer model developed by Quanta Technologies and there has been a collective effort to learn more about the function and functionality of the computer code. PURC and the Project Sponsors have worked to fill information gaps for model inputs and significant efforts have been invested in the area of forensics data collection. Since the state has

not been affected by any hurricanes since the database software was completed, there is currently no data. Therefore, future efforts to refine the undergrounding model will occur when such data becomes available.

In addition, PURC has worked with doctoral and master's candidates in the University of Florida Department of Civil and Coastal Engineering to assess some of the inter-relationships between wind speed and other environmental factors on utility equipment damage. PURC has also been contacted by engineering researchers at the University of Wisconsin and North Carolina State University with an interest in the model, though no additional relationships have been established. In addition to universities, PURC was again contacted by researchers at the Argonne National Laboratory who expressed interest in modeling the effects of storm damage. The researchers developed a deterministic model, rather than a probabilistic one, but did use many of the factors that the Collaborative have attempted to quantify. They are currently working to incorporate stochastic elements into their model and have consulted PURC for guidance. Every researcher that contacts PURC cites the model as the only non-proprietary model of its kind.

The research discussed in previous years' reports on the relationship between wind speed and rainfall is still under review by the engineering press. Further results of this and related research can likely be used to further refine the model.

#### **IV. Wind Data Collection**

The Project Sponsors entered into a wind monitoring agreement with WeatherFlow, Inc., in 2007. Under the agreement, Florida Sponsors agreed to provide WeatherFlow with access to their properties and to allow WeatherFlow to install, maintain and operate portions of their wind monitoring network facilities on utility-owned properties under certain conditions in exchange for access to wind monitoring data generated by WeatherFlow's wind monitoring network in Florida. WeatherFlow's Florida wind monitoring network includes 50 permanent wind monitoring stations around the coast of Florida, including one or more stations located on utility-owned property. The wind monitoring agreement expired in early 2012; however, the wind, temperature, and barometric pressure data being collected at these stations is being made available to the Project Sponsors on a complimentary basis.

#### **V. Public Outreach**

In last year's report we discussed the impact of increasingly severe storms on greater interest in storm preparedness. PURC researchers continue to discuss the collaborative effort in Florida with the engineering departments of the state regulators in Connecticut, New York, and New Jersey, Pennsylvania, and regulators in Jamaica, Grenada, Curacao, Samoa, and the Philippines. While all of the regulators and policymakers showed great interest in the genesis of the collaborative effort, and the results of that effort, they have not, at this point, shown further interest in participating in the research effort.

## **VI. Conclusion**

In response to the FPSC's Order 06-0351, IOUs, municipal electric utilities, and rural electric cooperatives joined together and retained PURC to coordinate research on electric infrastructure hardening. The steering committee has taken steps to extend the research collaboration MOU so that the industry will be in a position to focus its research efforts on undergrounding research, granular wind research and vegetation management when significant storm activity affects the state.

## **Initiative #10 – Natural Disaster Preparedness and Recovery Program**

FPUC will utilize the plan to prepare for storms annually and will ensure all employees are aware of their responsibilities. The primary objective of the Disaster Preparedness and Recovery Plan is to provide guidelines under which Florida Public Utilities Company will operate in emergency situations. This information is contained with the Emergency Procedures that are updated on an annual basis, if required. The following objectives are included to ensure orderly and efficient service restoration.

1. The safety of employees, contractors and the general public will have the highest priority.
2. Early damage assessment is required in order to develop manpower requirements.
3. Request additional manpower as soon as conditions and information indicate the need.
4. Provide for orderly restoration activities in order to provide efficient and rapid restoration.
5. Provide all logistical needs for employees and contractors.
6. Provide ongoing preparation of our employees, buildings, equipment and support function in advance of an emergency.
7. Provide support and additional resources for employees and their families should they need assistance to address injury or damage as a result of the emergency situation.

Based on the location of the storm, the division office in that area will be designated as the operations center and all restoration and logistical activities will be coordinated from that location. Restoration activities will be handled in the following manner:

1. During the early stages of the emergency, restoration will be handled in the usual manner. All service will be restored as soon as possible.
2. As the storm intensifies and trouble reaches major proportions, the main restoration activities will be limited to keeping main feeders energized by clearing trouble without making repairs.
3. When the intensity of the storm is such that work can no longer be done safely, all work will cease and personnel will report to the office or other safe locations.
4. When the storm has subsided to a reasonable level and it is safe to begin restoration activities damage assessment and restoration of main feeders to critical customers will begin.
5. Restoration activities will continue in an effort to restore service in the following manner:
  - a) Substations
  - b) Main feeders to critical customers
  - c) Other main feeders
  - d) Undamaged primary
  - e) Damaged primary, secondary, service, street lights, security lights

These guidelines are not intended to prevent responding to emergency situations. Any life threatening emergency will be handled immediately, in such a manner as to not endanger the lives of others.

Communication efforts with local governments, County EOC's and the media will be a key in ensuring a safe and efficient restoration effort. Key personnel will be designated as the media liaison and will ensure that communications regarding the status of the restoration activities are available on a scheduled basis.

2016 Emergency Procedures for both divisions along with any changes are as listed below.



# NORTHEAST DIVISION CHANGES

## 2. STORM MODE ORGANIZATIONAL CHART

**Added:**

Nassau County EOC Liaison  
Natural gas and propane directors

**Updated:**

Storm director and Safety coordinator

## 4. GENERAL RESTORATION GUIDELINES

E. "Restoration activities will be handled in the following manner:

**Added:**

6) Damaged primary, secondary, service, street lights, security lights

## 5. EMERGENCY ELECTRIC SAFETY PRECAUTIONS

**Revisions:**

"ALL incoming crews must have a safety briefing as soon as practical upon arrival and prior to starting any work. This will be to introduce them to our system and inform them of our expectations. Pole bands at open points shall be used to identify the work zone. Your own company safety rules SHALL be observed as well as our rubber glove, ground to ground rule during the storm and restoration period.

Be advised that NET metering is present on our system and can be identified by a green stripe around meter glass."

A. EVALUATING THE WORK:

Before undertaking any job, a job briefing shall be thoroughly discussed and all personnel shall understand what is to be done, how it is to be done, and the following:

1. Voltage and position of all wires, or cables, and the sources or source of energy.
2. All grounding and switching procedures shall be observed.
3. That the work at hand can be done safely.
4. That there is a sufficient amount of each kind of protective equipment on hand to thoroughly protect the working position and the work man.
5. They should consider the ground and traffic conditions and arrange to protect and guard these against all hazards.

B. INSULATION:

In cases of trouble following storms, all wires, regardless of normal voltage, are to be considered as being at primary voltage and are not to be handled except with protective equipment because of danger of crosses between primary and secondary circuits. (This is a ground to ground statement) This may be modified on a case by case basis by the joint agreement of the Operations Manager and Safety Coordinator.

If the transmission line is also out of service, it must be considered as a possible source from which the distribution circuit may be energized, and it must be definitely determined that the

transmission circuit as well as the distribution circuit is de-energized and grounded and the source or sources of supply are open and proper clearance obtained before the distribution circuit may be worked as de-energized.

E. FUSE CUT-OUT CLEARANCE:

**Added:**

A pole band SHALL be used to identify who is working beyond the open point.

G. SWITCHING ORDERS:

**Added:**

All switching orders must be written on a piece of paper by the person receiving same, and this written order must be carried by the person while doing the switching. ***In no case shall anyone attempt to execute a switching order from memory.*** All switching orders and tags shall be turned into the Safety Coordinator as soon as practical.

6. ANNUAL PREPARATIONS

Electric Operations Manager

**Moved to Safety:**

- B. Review employee assignments with all personnel prior to June 1.
- D. Schedule and conduct half day emergency procedure training sessions prior to July 1. Written documentation is to be retained when training is complete.

**Added:**

- B. Develop employee assignments with all personnel prior to June 1.
- E. Ensure that Safety, Logistics, Operations and Engineering have completed pre-storm preparations.

Assistant Electric Operations Manager

**Moved to Safety:**

- C. Review safety precautions with all line crew personnel prior to June 1.

**Added:**

Safety

- A. Review safety precautions with all line crew personnel prior to June 1.
- B. Schedule and conduct half day emergency procedure training sessions prior to July 1. Written documentation is to be retained when training is complete.
- C. Review assignments with each department by July 1.

Customer Care / Logistics Manager

**Moved to “Natural Gas Operations Supervisor”**

- F. Update status of building security firm.

7. INITIATE STORM MODE PLAN

**Title changes:** Electric Operations Manager to Storm Director  
Assistant Operations Manager to Operations Director  
Safety Title added  
Customer Care/Logistics Manager to Logistics Director  
Engineering to Engineering Director

**8. INITIAL STAGE OF THE EMERGENCY**

**Title changes:** Electric Operations Manager to Storm Director  
Assistant Operations Manager to Operations Director  
Safety Title added  
Customer Care/Logistics Manager to Logistics Director  
Engineering to Engineering Director

**Storm Director**

**Added:**

D. Communicate with Nassau County EOC on their operations schedule.

**Safety**

- A. Prepare for arrival of external crews.
- B. Prepare daily safety briefing to be delivered to internal and external crews.

**9. LOCAL STORM MODE**

**Added:**

**Safety**

- A. Daily safety briefings for internal and external crews.
- B. Incident investigations.
- C. Field observations.

**Revised:**

**C. AFTER THE STORM**

The sequence of restoration after the winds subside to a safe working level will be as follows:

- 1) Check substations (Investigation) – Asses Damages
  - a. Verify Transmission Service
  - b. Asses Equipment Damage
  - c. Identify Feeder Lockouts
- 2) Transmission Line Patrols
  - d. a. JEA switch yard to Step-down

- e. b. Step-down to AIP
- f. c. Step-down to JLT
- d. JLT to both mills

3) Isolate & Restore Process

This phase will be occurring immediately following the passing of the storm and the area has been designated as being safe. The Storm Director will identify feeders that are out and prioritizing them for the *isolate and restore* process based upon the priority feeder list and observed outages. Feeder patrols shall be performed by two man crews.

4) Damage Assessments

After the isolate and restore phase, the damage assessment (DA) teams will patrol the backbone portion of the feeders that *have been isolated and restored first*.

5) Restoration Order

- A. Feeders
- B. Undamaged primaries (fuse replacement only)
- C. Damaged primaries
- D. Secondaries
- E. Services
- F. Street lights

**16. EMPLOYEE ASSIGNMENTS**

Operations Manager changed to Warren DiNapoli  
Lineman changed to Randy Drake  
Safety Changed to Todd Neville

Telephone contacts lists updated

**NORTHWEST DIVISION CHANGES**

**2. ORGANIZATIONAL CHART**

Misc. changes to the organizational chart, re-classified Line Supervisor to Assistant Operations Manager and Engineering Manager to Senior Engineer. These changes are reflected throughout the 2016 Emergency Procedures.



***FLORIDA PUBLIC UTILITIES  
COMPANY***

***NORTHEAST FLORIDA DIVISION***

# **2016**

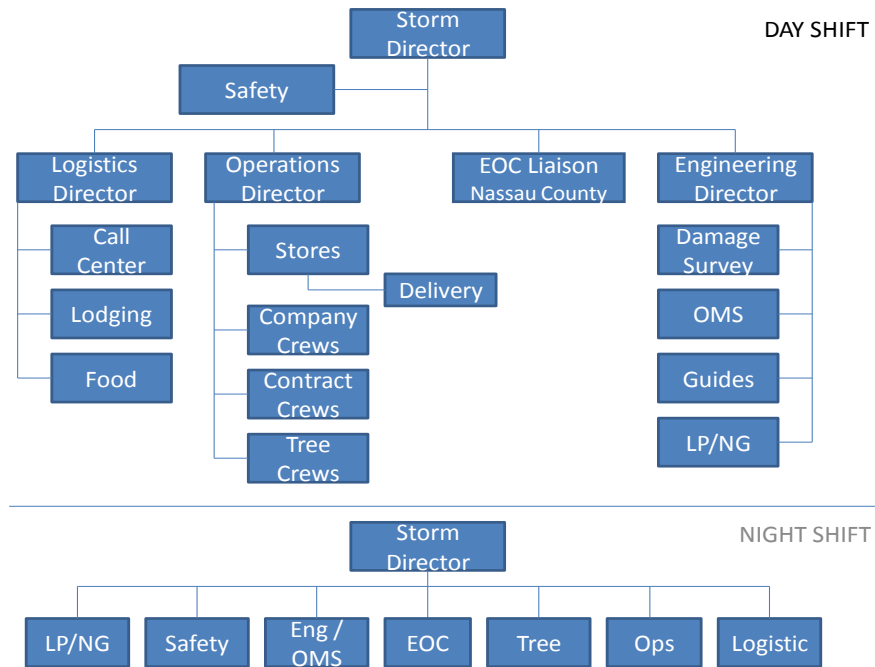
## ***EMERGENCY PROCEDURES NATURAL DISASTER & RECOVERY***

### **1. OBJECTIVE**

The primary objective of the procedure is to provide guidelines under which the Northeast Florida Division of Florida Public Utilities Company will operate in emergency conditions. The following objectives will ensure orderly and efficient service restoration.

- A. The safety of employees, contractors and the general public will have the highest priority.
- B. Early damage assessment is required in order to develop manpower requirements.
- C. Request additional manpower as soon as conditions and information indicate the need.
- D. Provide for orderly restoration activities in order to provide efficient and rapid restoration.
- E. Provide all logistical needs for employees and contractors.
- F. Provide ongoing preparation of our employees, buildings, equipment and support function in advance of an emergency.
- G. Provide support and additional resources for employees and their families should they need assistance to address injury or damage as a result of the emergency situation.

2. **STORM MODE ORGANIZATIONAL CHART**



**DAY SHIFT**

**2016**

**NIGHT SHIFT**

WARREN DINAPOLI	STORM DIRECTOR	TBD*
JORGE PUENTES	ENGINEERING DIRECTOR	SHANE MAGNUS
CHRIS HEBERT	OPERATIONS DIRECTOR	TBD*
ROGER LACHARITE	LOGISTICS DIRECTOR	PATTI THORNTON
TODD NEVILLE	SAFETY	TBD*
DAVID RICHARDSON	NASSAU COUNTY EOC LIAISON	TBD*
GEORGE SPEERIN	NATURAL GAS & PROPANE	DAVE PLUTA

\*WILL BE FILLED FROM AVAILABLE RESOURCES

### 3. EMERGENCY PERSONNEL POLICY

As a public utility we provide essential services for our customers and the general public. Therefore, the purpose of the Company's Emergency Personnel Policy is to encourage employees to make every reasonable effort to report to work. Each employee performs an essential role in the Company's operation and it's important that you report to duty as scheduled during an emergency. Restoring and maintaining services after a major storm is a difficult job and requires everyone's best efforts. Of necessity, employees may be required to assist other departments or perform functions outside of their normal daily work assignment. It will take every employee's cooperation before, during and after an emergency.

- A. If you are on the job when the storm approaches, your supervisor will inform you of your storm assignment. Employees not directly involved in maintaining services may be released to go home before the storm threatens safe travel.
- B. If you are off-duty, call your immediate supervisor as soon as possible after an emergency condition is announced. An Emergency Condition Warning is usually given within 24 hours of occurrence. Your supervisor will inform you as to where and when you'll be needed prior to, during, and after the storm. If your supervisor is not available call his/her immediate supervisor or the Northeast Florida Office. This requirement applies to all electric, natural gas and propane division employees when an emergency threatens any of the Company's electric service areas.
- C. After the emergency passes, all personnel not on duty during the storm will report as soon as possible to their supervisor or his/her designate by telephone. In the event the telephones are not working or you are unable to communicate with your supervisor or the company office, report in person to your regular work station as soon as possible during daylight hours.
- D. EMPLOYEES ARE TO MAKE EVERY REASONABLE EFFORT TO REPORT TO WORK. IT'S UNDERSTOOD THAT THERE WILL BE INSTANCES WHERE EMPLOYEES JUST CAN'T GET TO WORK. EMPLOYEES WHO DO NOT REPORT TO WORK WILL NOT BE PAID. IF YOU ARE UNABLE TO REPORT TO WORK MAKE EVERY EFFORT TO CONTACT YOUR SUPERVISOR TO REPORT YOUR ABSENCE. DISCIPLINARY ACTION UP TO AND INCLUDING DISCHARGE MAY BE TAKEN AGAINST EMPLOYEES WHO DO NOT REPORT TO WORK WITHOUT JUST CAUSE.
- E. Personal emergencies are common results of a major hurricane but, unless life threatening, will not be acceptable as an excuse for not reporting to work. Evacuation from a hurricane threatened area to a remote location from which you cannot promptly return to your home is also not acceptable as a reason for not reporting to work.
- F. The Company will endeavor to provide assistance and shelter to employees and their immediate families should an employee need or request assistance.
- G. Unless emergency conditions warrant, employees will not be required to work in excess of sixteen (16) consecutive hours.

The success of the emergency plan requires the cooperation and efforts of all of our employees. Employees may be required to return from their vacation or Company sponsored travel. Therefore, it will be the responsibility of each supervisor to determine the location of each of their employees on Company sponsored trips to facilitate their recall if conditions warrant their return when the emergency plan is implemented. Employees who are on vacation will notify, by telephone, their supervisors of their location and availability when an emergency threatens to strike our service area. Supervisors will consult with their department head to determine the feasibility and need to recall employees from vacation or Company sponsored trips. All employees are essential for the continued operation of the Company obligations and Company objectives.

The Company will develop information which will assist employees and their families before, during and after the storm. The Electric Operations Manager, Northeast Florida will be responsible for obtaining the information and communicating this information to the employees. The Company will attempt to provide as much assistance as practical to the employees and their families during emergency situations.



However, it is the responsibility of each employee to develop a personal plan that can be quickly implemented in case a storm impacts our area. This plan should involve the protection of family and property which can be put into action quickly and allow for compliance with the above mentioned requirements. Every effort will be made to allow employees time off prior to a storm to make preparations for the event.

#### **4. GENERAL RESTORATION GUIDELINES**

These general guidelines are issued to provide overall guidance as to emergency system restoration activities. These guidelines will be followed as much as practical in emergencies caused by hurricanes, tornadoes, ice storms and other natural disasters.

These guidelines are not intended to nor will they put in jeopardy the safety of any employee or their family. Dependent upon the intensity of the storm as determined by the company's management, employees will be required to report to work as instructed. If the intensity of the storm is such that weather conditions will be extremely severe, only a skeleton crew will be present at the work location. All others will report for duty as soon as conditions subside to a reasonable level. Those on vacation will be expected to report for duty.

The Northeast Florida office building was designed to withstand 160 mph sustained winds. Should winds be expected to significantly exceed these ratings, alternative locations will be identified and restoration will be relocated to an appropriate facility.

Restoration activities will be handled in the following manner:

- A. During the early stages of the emergency, restoration will be handled in the usual manner. All service will be restored as soon as possible.
- B. As the storm intensifies and trouble reaches major proportions, the main restoration activities will be limited to keeping main feeders energized by clearing trouble without making repairs.
- C. When the intensity of the storm is such that work can no longer be done safely, all work will cease and personnel will report to the office or other safe location. Ariel work will not be conducted when wind speed reach 40 miles per hour.
- D. When the storm has subsided to a reasonable level and it is safe to begin restoration activities damage assessment and restoration of main feeders to critical customers will begin.
- E. Restoration activities will continue in an effort to restore service in the following manner:
  - 1) Transmission
  - 2) Substations
  - 3) Main feeders to critical customers
  - 4) Other main feeders
  - 5) Undamaged primary
  - 6) Damaged primary, secondary, service, street lights, security lights

These guidelines are not intended to prevent responding to emergency situations. Any life threatening emergency will be handled immediately, in such a manner as to not endanger the lives of others.

Each employee and contractor should maintain good customer relations during restoration activities. Customer service will continue to be a high priority and every reasonable effort should be made to satisfy our customers.

Press releases and public announcements should be made only by designated company management personnel.

## 5. EMERGENCY ELECTRIC SAFETY PRECAUTIONS

All Rules in the Safety Manual should be observed. However, in order to point out some particular precautions which should be observed during storms, the following instructions listed below should receive special emphasis:

ALL incoming crews must have a safety briefing as soon as practical upon arrival and prior to starting any work. This will be to introduce them to our system and inform them of our expectations. Pole bands at open points shall be used to identify the work zone. Your own company safety rules SHALL be observed as well as our rubber glove, ground to ground rule during the storm and restoration period.

Be advised that NET metering is present on our system and can be identified by a green stripe around meter glass.

### A. EVALUATING THE WORK:

Before undertaking any job, a job briefing shall be thoroughly discussed and all personnel shall understand what is to be done, how it is to be done, and the following:

6. Voltage and position of all wires, or cables, and the sources or source of energy.
7. All grounding and switching procedures shall be observed.
8. That the work at hand can be done safely.
9. That there is a sufficient amount of each kind of protective equipment on hand to thoroughly protect the working position and the work man.
10. They should consider the ground and traffic conditions and arrange to protect and guard these against all hazards.

### B. INSULATION:

In cases of trouble following storms, all wires, regardless of normal voltage, are to be considered as being at primary voltage and are not to be handled except with protective equipment because of danger of crosses between primary and secondary circuits. (This is a ground to ground statement) This may be modified on a case by case basis by the joint agreement of the Operations Manager and Safety Coordinator.

### C. DISTRIBUTION CIRCUITS ON OR NEAR TRANSMISSION POLES:

If it is necessary to work on the conductors of a distribution circuit carried on or near transmission line poles with the transmission circuit energized and normal, any work on the conductors of the distribution circuits must be done between sets of grounds or else the distribution circuit must be worked and treated as an energized circuit. To determine positively that the lines to be worked are de-energized, test or investigation must be made before grounds are applied.

If the transmission line is also out of service, it must be considered as a possible source from which the distribution circuit may be energized, and it must be definitely determined that the transmission circuit as well as the distribution circuit is de-energized and grounded and the source or sources of supply are open and proper clearance obtained before the distribution circuit may be worked as de-energized.

### D. STREET LIGHTING WIRES:

Street lighting wires shall be considered energized at all times and the workman shall protect himself against them with proper protective equipment even when circuits are normally de-energized. Such a line can become energized by accidental induction or lightning and sometimes street lighting wires become crossed with other energized wires.

E. FUSE CUT-OUT CLEARANCE:

When a distribution circuit is to be de-energized and cleared for working on conductors or other equipment by the opening of a fuse cut-out, either of the enclosed or open type, the fuse holder or tube is to be removed completely from the fuse assembly. The removed fuse holder or tube is to be placed at a safe and conspicuous location away from the fuse cut-out as an indication to other employees that the fuse cut-out shall continue in this open position until the work is completed. In addition, a red "hold" switch tag (with Lineman's name) should be attached to the pole in a conspicuous location and then removed when work is completed.

A pole band SHALL be used to identify who is working beyond the open point.

F. REQUIREMENTS FOR USE OF RUBBER PROTECTIVE APPARATUS:

In case of trouble following storms, all wires, regardless of normal voltage, are to be considered as being at primary voltage and are not to be handled except with protective equipment because of danger of crosses between primary and secondary circuits.

1. Energized Conductors - Rubber gloves must always be worn when working on energized lines or energized conductors or equipment up to 15,000 volts between conductors.
2. Working position - Rubber gloves must be put on before coming in reach of energized conductors when work is done on conductors or protective equipment is to be installed.

Because of the possibility of high voltage existing, rubber gloves must be worn until the conductor is grounded on primary circuits and on street lighting circuits.

Care of Rubber Protective Apparatus - At each job, before a workman puts on his rubber gloves, he should test each glove mechanically for cuts and weak spots by rolling it up tightly, beginning at the gauntlet. All of this type equipment, when not in use, must be stored in dry proper containers or compartment provided for this purpose.

G. SWITCHING ORDERS:

All feeder switching and switching orders shall be communicated to the Operations Director. In all switching orders, the switches shall be referred to by their numbers and not by the name of the circuit which they control. The sequence, in which the switch numbers are given, in the order, shall indicate the sequence of the switching operation. For example, an order given: "open switches 502-509 and close switches 511-502" shall be executed as follows: first, open switch 502; second, open switch 509; third, close switch 511; fourth, close switch 502.

NO DEVIATION FROM THIS RULE WILL BE PERMITTED.

To avoid misunderstandings and to prevent accidents, all orders concerning switching operation or the handling of lines and equipment must be repeated to the person giving name, and identity of person giving order secured. Likewise, the operator giving an order must secure identity of person to whom it is given. (Three part communication)

All switching orders must be written on a piece of paper by the person receiving same, and this written order must be carried by the person while doing the switching. ***In no case shall anyone attempt to execute a switching order from memory.*** All switching orders and tags shall be turned into the Safety Coordinator as soon as practical.

H. HIGH WATER:

During periods of high water involving lines or equipment, patrolmen shall not attempt to swim sections of the patrol which may be submerged. Necessary patrols over flooded areas must be done with boats and in such instances men engaged in these patrols shall wear suitable life belts or jackets.

I. **BROKEN CONDUCTORS:**

Before climbing pole, check for broken conductors, which may be in contact with pole. Clear before climbing.

6. **ANNUAL PREPARATIONS**

**Electric Operations Manager**

- A. Review emergency procedure prior to May 1 and update as necessary.
- B. Develop employee assignments with all personnel prior to June 1.
- C. Update status of emergency crew assistance (Contractors, NW Florida, SEE, etc.).
- D. Ensure storm shutters, laundry facilities and cooking facilities are available.
- E. Ensure that Safety, Logistics, Operations and Engineering have completed pre-storm preparations.

**Assistant Electric Operations Manager**

- A. Check all communication equipment for proper operation. Check spare equipment and parts.
- B. Check material quantities and emergency stock prior to June 1. Communicate material requests to Stores Manager to purchase the emergency stock approved for purchase prior to an emergency.
- C. Have necessary emergency material delivered prior to June 1.
- D. Review status of all transportation equipment and have repairs made.
- E. Update status of remote storeroom site and trailer(s).
- F. Update status of emergency fuel suppliers, on site fuel and mobile fuel suppliers.
- G. Update status of vehicle repair facilities.

**Safety**

- D. Review safety precautions with all line crew personnel prior to June 1.
- E. Schedule and conduct half day emergency procedure training sessions prior to July 1. Written documentation is to be retained when training is complete.
- F. Review assignments with each department by July 1.

**Propane Operations Manager**

- A. Check all communication equipment for proper operation. Check spare equipment and parts.

- B. Check material quantities and emergency stock prior to June 1. Begin necessary purchasing of emergency stock approved for purchase prior to an emergency.
- C. Review safety precautions with all propane personnel prior to June 1.
- D. Have necessary emergency material delivered prior to June 1.
- E. Review status of all transportation equipment and have repairs made.
- F. Update status of emergency fuel suppliers, on site fuel and mobile fuel suppliers.
- G. Update status of vehicle repair facilities.

**Natural Gas Operations Supervisor**

- A. Check all communication equipment for proper operation. Check spare equipment and parts.
- B. Update status of building security firm.
- C. Check material quantities and emergency stock prior to June 1. Begin necessary purchasing of emergency stock approved for purchase prior to an emergency.
- D. Review safety precautions with all natural gas personnel prior to June 1.
- E. Have necessary emergency material delivered prior to June 1.
- F. Review status of all transportation equipment and have repairs made.
- G. Update status of emergency fuel suppliers, on site fuel and mobile fuel suppliers.
- H. Update status of vehicle repair facilities.

**Customer Care / Logistics Manager**

- A. Update the list of critical customers by town/county and provide updates to the Storm Director by June 1. Group the critical customers by town/county by classification:
  - 1) Hospitals and clinics
  - 2) Public utilities
  - 3) Municipal and state emergency service
  - 4) Communication and broadcasting services
  - 5) Major food storage/processing facilities
  - 6) Disaster shelter and motels
  - 7) Correctional facilities
  - 8) Airport
- B. Update phone list for employees, law enforcement, emergency management, city/towns, utilities, contractors, tree trimming, personnel, news media, PSC, DCA, EDC, GEO, etc. and provide updates to the Storm Director by June 1.
- C. Review emergency telephone arrangements and make additional preliminary arrangements.
- D. Update status of thirty (30) motel rooms necessary for emergency/contract crews.

- E. Locate sources of food/water for crews and office personnel. Identify local and out of town caterers.
- F. Locate sources for provision of the following Division office supplies.
  - 1. Three days' supply of food and water. (See section 22, Logistics for List of Supplies)
  - 2. Supply of air mattress/cots.
  - 3. Portable AM/FM radios with batteries.
  - 4. Laundry services/supplies.
  - 5. First aid supplies.
  - 6. Twenty (20) flashlights with batteries.
  - 7. Linen service.
  - 8. Miscellaneous supplies post storm shelter.
- G. Update status of ten (10) cellular phones.
- H. Update the procedure of the Office Operation.

**Engineering Director**

- A. Update and have on hand the following:
  - 1. Storm safety precautions
  - 2. General operating instructions
  - 3. Distribution maps
  - 4. Single line switching maps
  - 5. City and county maps
- B. Have control room and all necessary information and equipment ready for prompt setup. Phone jacks, internet connection and distribution map are minimum requirements.
- C. Conduct annual refresher training for personnel required to operate the Customer Outage System.

**7. INITIATE STORM MODE PLAN**

**Storm Director**

- A. Monitor the emergency.
- B. Begin making preparations for obtaining emergency assistance from other utilities and contractors.
- C. Check the status of personnel on vacation.
- D. Handle all media request by relaying contact information to the Assistant VP of Marketing or the Safety Manager.
- E. Inform all employees as to assignments and emergency information.
- F. Consult with the Executive Team concerning activation of Division Emergency Procedures.
- G. Consult with Executive Team concerning assistance from other divisions (i.e. mechanics, storeroom, media, family assistance, IT/Communications). Personnel from other divisions will be identified and mobilized. They

will move as close as practical to Northeast Florida and then proceed to the office as soon after the emergency as travel can be accomplished safely. This location may change dependent upon the situation.

- H. Obtain special job number for all emergency related work.
- I. Make determination on when to release personnel to go home and provide instructions to employees.
- J. Ensure contact with JEA is established.

#### **Operations Director**

- A. Have all vehicles stocked with all necessary emergency materials and fuel.
- B. Monitor time/material needs of contractors.
- C. Check emergency stock levels and fuel supplies.
- D. Review plan to supply power to office and warehouse facility.
- E. Check all communication equipment.
- F. Review safety precautions with all personnel.
- G. Review job assignments with personnel and pass out necessary forms, information.
- H. Have all hazardous conditions corrected and construction jobs stabilized.
- I. Verify emergency generator is fully fueled and operable with back-up fuel available.
- J. Make arrangements for a boat and trailer suitable for construction.
- K. Ensure all vehicle repairs are made and final arrangements with vehicle repair facilities confirmed.
- L. Check on emergency generators and secure additional generators if needed.
- M. Secure all material in the warehouse yard.

#### **Safety**

- A. Monitor the Storm.
- B. Check and verify that yard and buildings are safe and secure.

#### **Propane Operations Manager**

- A. Have all vehicles stocked with all necessary emergency materials and fuel.
- B. Monitor time/material needs of contractors.
- C. Check emergency stock levels and fuel supplies.
- D. Review plan to supply power to bulk plant using backup power supplies.

- E. Check all communication equipment.
- F. Review safety precautions with all personnel.
- G. Review job assignments with personnel and pass out necessary forms, information.
- H. Have all hazardous conditions corrected and construction jobs stabilized.
- I. Verify emergency generator is fully fueled and operable with back-up fuel available.
- J. Ensure all vehicle repairs are made and final arrangements with vehicle repair facilities confirmed.
- K. Secure all material in the warehouse yard.
- L. Install Storm Shutters on all offices with the help of natural gas.
- M. Place plastic covering over all electronic or sensitive equipment and secure as necessary.

**Natural Gas Operations Supervisor**

- A. Have all vehicles stocked with all necessary emergency materials and fuel.
- B. Monitor time/material needs of contractors.
- C. Check emergency stock levels and fuel supplies.
- D. Review plan to supply power to bulk plant using backup power supplies.
- E. Check all communication equipment.
- F. Review safety precautions with all personnel.
- G. Review job assignments with personnel and pass out necessary forms, information.
- H. Have all hazardous conditions corrected and construction jobs stabilized.
- I. Verify emergency generator is fully fueled and operable with back-up fuel available.
- J. Ensure all vehicle repairs are made and final arrangements with vehicle repair facilities confirmed.
- K. Secure all material in the warehouse yard.

**Logistics Director**

- A. Arrange for additional petty cash and cash advances (if necessary).
- B. Arrange with telephone company additional lines if necessary.
- C. Review assignments with personnel.
- D. Ensure all computers are backed up and secured.
- E. Ensure all paperwork/documents are filed and secured properly.
- F. Provide control room with customer list, addresses, phone numbers and account numbers.



- G. Work with HR department and personnel from other divisions to provide assistance to employees and their families. Assistance may include work to prevent further damage to homes, care for children, to work with contractors or insurance companies and provide food/lodging/clothing, etc.
- H. Make definite arrangements for contract crew lodging.
- I. Make definite arrangements for food/water/drinks for all personnel.
- J. Purchase food supply for office/warehouse prior to storm (if the severity of the storm warrants this).
- K. Run the hurricane report from ORCOM.
- L. Make arrangements for an abundant supply of ice.
- M. Make definite arrangements for building security.
- N. Make definite arrangements for Division Office supplies (See Annual Preparations, Logistics Manager, and Item E.)
- O. Place plastic covering over all electronic or sensitive equipment and secure as necessary.

**Engineering Director**

- A. Provide distribution maps, procedures, etc. as necessary.
- B. Ensure Mapping System is backed up and operating.
- C. Begin constant monitoring customer outages.
- D. Review the contents of the damage assessment kits.

**8. INITIAL STAGE OF THE EMERGENCY**

**Storm Director**

- A. Activate the control room located Northeast Florida and constantly monitor the situation and restoration process.
- B. Keep internal media sources informed.
- C. Plan for additional services that will be needed during the restoration process to include damage assessment teams and mutual assistance crews.
- D. Communicate with Nassau County EOC on their operations schedule.

**Operations Director**

- A. Be located at the Northeast Florida Operations Center (if possible) and constantly monitor the situation and restoration process.
- B. Coordinate overall restoration process.

- C. Begin analyzing trouble.
- D. Ensure employees that may be working are secure when wind gusts reach 40 miles per hour.
- E. Work with Storm Director to determine restoration requirements.

**Safety**

- A. Prepare for arrival of external crews.
- B. Prepare daily safety briefing to be delivered to internal and external crews.

**Propane Operations Manager**

- A. Be located at the Northeast Florida Operations Center (if possible) and constantly monitor the situation and restoration process.
- B. Activate propane restoration process.
- C. Coordinate with Engineering.

**Natural Gas Operations Supervisor**

- A. Be located at the Northeast Florida Operations Center (if possible) and constantly monitor the situation and restoration process.
- B. Activate propane restoration process.
- C. Coordinate with Engineering.

**Logistics Director**

- A. Be located at the Northeast Florida Operations Center (if possible) and coordinate the answering and processing of telephone calls.
- B. Coordinate assistance to employees and their families.
- C. Have food and drinks available to all employees.
- D. Work with Operations Manager and begin making final logistical arrangements for outside crews.

**Engineering Director**

- A. Be located at the Northeast Florida Operations Center (if possible) and Continue processing customer outage system analysis and monitoring system to determine outage locations.
- B. Work with Operations Manager to determine restoration requirements.
- C. Provide periodic outage updates to the PSC and Nassau County EOC.

**9. LOCAL STORM MODE**

**Storm Director**

- A. Determine manpower requirement from information provided by Operations Director and Engineering Director. Contact the Executive Team concerning the situation, if possible, and advise whether or not the additional personnel should continue to the Northeast Florida office. If communications are not possible, the President will determine whether or not the team should continue to Northeast Florida or will return home. .
- B. Activate additional services that will be needed during the restoration process to include damage assessment teams and mutual assistance crews.
- C. Keep the media informed until such time that the Manager of Communications is available. At that time, the Manager of Communications will work with the Storm Director to keep the Media informed.

#### **Operations Director**

- A. Initiate damage assessment teams.
- B. Prioritize and schedule the restoration process.
- C. Make assignments and dispatch crews as necessary in order to ensure orderly and efficient restoration.
- D. Provide damage assessment to Storm Director.
- E. Provide updates to Storm Director as needed concerning restoration progress.
- F. Monitor manpower and equipment requirements and update Storm Director as required.
- G. Keep a list of all company and outside crews and their locations.
- H. Determine and assign appropriate manpower and equipment for each outage situation.
- I. Provide outside crews with all necessary information and safety information.
- J. Monitor storeroom and remote storeroom for proper operation and inventory. Analyze manpower requirements.
- K. Ensure all documents are completed prior to material leaving the storeroom and storeroom yard.
- L. Monitor and provide assistance in repairing vehicles.

#### **Safety**

- A. Daily safety briefings for internal and external crews.
- B. Incident investigations.
- C. Field observations.

#### **Propane Operations Manager**

- A. Make assignments and dispatch crews as necessary in order to ensure orderly and efficient restoration.
- B. Provide damage assessment to Storm Director.
- C. Provide updates to Storm Director as needed concerning restoration progress.
- D. Monitor manpower and equipment requirements and update Storm Director as required.
- E. Keep a list of all company and outside crews and their locations.

- F. Determine and assign appropriate manpower and equipment for each situation.
- G. Provide outside crews with all necessary information and safety information.
- L. Monitor and provide assistance in repairing vehicles.

**Natural Gas Operations Supervisor**

- A. Make assignments and dispatch crews as necessary in order to ensure orderly and efficient restoration.
- B. Provide damage assessment to Storm Director.
- C. Provide updates to Storm Director as needed concerning restoration progress.
- D. Monitor manpower and equipment requirements and update Storm Director as required.
- E. Keep a list of all company and outside crews and their locations.
- F. Determine and assign appropriate manpower and equipment for each situation.
- G. Provide outside crews with all necessary information and safety information.
- L. Monitor and provide assistance in repairing vehicles.

**Logistics Director**

- A. Coordinate the answering of telephone calls.
- B. Provide petty cash and pay bills as needed.
- C. Contact critical customer if the restoration time will be lengthy.
- D. Provide assistance and serve as liaison to employees and their families.
- E. Make final and definite arrangements for lodging, fuel, meals, snacks, coffee, drinks, etc. for all employees and contract employees.
- F. Check-in all outside crews and log the personnel and equipment included. Provide assistance with lodging, meals, etc. and keep up with crew locations.
- G. Provide assistance as needed.
- H. Ensure building security firm is operating at office.
- I. Ensure Division office supplies are in place if needed.
- J. Ensure caterers are available as needed.

**Engineering Director**

- A. Continue processing customer outage system analysis and monitoring the system to determine outage locations.
- B. Work with Storm Director and Operations Director to determine restoration requirements.
- C. Provide periodic outage updates to the PSC and Nassau County EOC.

## 10. Operating Procedure

These instructions are intended to give the employee working on the line information as to the general procedure to be followed under hurricane conditions.

The Electric Operations Manager and Customer Service Manager will review these instructions with their employees each year so that they may become familiar with the details. This should be done before July 1 of each year.

### A. BEFORE THE STORM

All operating personnel should be instructed as to:

1. Safety and operating procedures to be followed during the storm.
2. Where and when materials and supplies will be available.
3. Their assigned areas and supervisor.
4. Any provisions made for feeding and lodging.
5. Work days will normally be two shifts. Each shift will consist of at least 12 hours but could be 16 hours.
6. The necessity of dividing line crews for clearing and minor repairs.
7. Internet and telephone communication procedures with appropriate list of telephone numbers.

### B. DURING THE STORM

#### 1) First Stage - Repairing All Cases Reported

In order to reduce the over-all outage time to customers who may be interrupted at the beginning of the storm, trouble will be handled in a normal manner during the early stages.

#### 2) Second Stage - Clearing Trouble From the Lines

In order to maintain service to essential customers and feeders; when the volume of trouble increases to the point where large areas are interrupted, the Supervisor will instruct crews to clear trouble from the lines without making repairs.

- a. Secondary or service wires may be cleared by cutting the conductor away from energized lines or by opening the transformer cut-out.
- b. Damaged primary conductors may be cleared by cutting and rolling back, a primary jumper or conductor at the cross arm or by sectionalizing switching, if applicable.

#### 3) Third Stage - De-energizing Main Lines

When the winds reach the point where it is no longer safe for crews to continue clearing operations all restoration activities will cease. The Line Supervisor may instruct crews to de-energize main line feeders at substations if necessary to clear extremely hazardous conditions.

### C. AFTER THE STORM

The sequence of restoration after the winds subside to a safe working level will be as follows:

- 1) Check substations (Investigation) – Asses Damages
  - g. Verify Transmission Service
  - h. Asses Equipment Damage

- i. Identify Feeder Lockouts
- 2) Transmission Line Patrols
- a. JEA switch yard to Step-down
  - b. Step-down to AIP
  - c. Step-down to JLT
  - d. JLT to both mills

3) Isolate & Restore Process

This phase will be occurring immediately following the passing of the storm and the area has been designated as being safe. The Storm Director will identify feeders that are out and prioritizing them for the *isolate and restore* process based upon the priority feeder list and observed outages. Feeder patrols shall be performed by two man crews.

4) Damage Assessments

After the isolate and restore phase, the damage assessment (DA) teams will patrol the backbone portion of the feeders that *have been isolated and restored first*.

5) Restoration Order

- A. Feeders
- B. Undamaged primaries (fuse replacement only)
- C. Damaged primaries
- D. Secondaries
- E. Services
- F. Street lights

## 11. TELEPHONE OPERATORS GUIDE

During any major interruption our customers will naturally be concerned about falling wires, burning wires, defrosting refrigeration and even their daily routines in which electricity plays a part. The most important test we have is maintaining good relations during these emergencies. Those employees answering telephones must keep this in mind - be calm, pleasant and sympathetic with the customer and at the same time getting the necessary information needed to clear dangerous conditions and restore service as soon as possible, giving as much information to the customer that is available.

Outlined below is a suggested procedure to be used during three different phases of an interruption (The Director of Electric or Electric Operations Manager will determine when Phase 1 begins and when movement to Phase 2 and 3 is indicated):

Phase 1 - will be in effect until the time of the first trouble calls are worked or until it is evident that there is a widespread damage in that area.

Phase 2 - will be in effect following Phase 1 until damage evaluations have been made and estimate of the time required for making major repairs.

Phase 3 - will begin in an area where an estimate of the time required to make major repairs is available and will continue until all trouble is clear.

Your supervisor will advise you when conditions change from one phase to another in accordance with the routines outlined below:

Suggested Answering Routine to be used by All Operators

Phase 1 - Early Trouble Prior to Extensive Damage

1. "Florida Public Utilities, May we help you please."
  - a. If no lights, no power, lights dim, ask: "What is your name, address and telephone number please?"
  - b. If wire down, pole broken, tree on a line, ask:
    - 1) "Is the wire burning?"
    - 2) "Are your lights working?"
    - 3) "We hope to be able to make repairs shortly. Thank you very much for calling."

Phase 2 - Extensive Damage Evident But Estimate of Repair Time Not Available

1. "Florida Public Utilities, May we help you please."
  - a. If no lights, no power, lights dim, ask: "What is your name, address and telephone number please?"
  - b. If wire down, pole broken, tree on a line, ask:
    - 1) "Is the wire burning?"
    - 2) "Are your lights working?"
    - 3) "Our electric system has suffered considerable damage in your area and we haven't been able to make an estimate of the time required for repairs. Our crews are working now and if your service has not been restored by (morning/afternoon) please call again. Thank you."

Phase 3 - Damage Evaluated and Repair Time Estimated

1. "Florida Public Utilities, May we help you please."
  - a. If no lights, no power, lights dim, ask: "What is your name, address and telephone number please?"
  - b. If wire down, pole broken, tree on a line, ask:
    - 1) "Is the wire burning?"
    - 2) "Are your lights working?"
    - 3) "We have crews working on the lines which serve your area and repairs should be made by (time). If your electricity is not on by that time, please call again. Thank you."

Operators Guide

You will be relieved for meals, etc., and at the end of your shift.

Remember a properly handled telephone conversation with a customer can create an immeasurable amount of good will. When conversing with customers, keep the following points in mind:

1. Be courteous to each customer.
2. Give him/her as much information as is available of the restoration work.
3. Record each call and report the information vital to restoring the customer's service.
4. Handle each call as briefly as possible.
5. Thank the customer for calling.
6. Do not give the news media information. If a request for new information is received, record the name of the individual, news organization, telephone number and specific request. Inform the caller that a company representative will return the call. The information should be sent immediately to the Electric Operations Manager, Northeast Florida.
  
7. During an emergency condition, some customers will contact the company for reasons that do not pertain to the emergency. These calls should be recorded and the exact customer needs should be stated in the remarks column. These calls may include disconnections, reconnections, etc., or may be a personal call to an employee. After the contact has been recorded, the completed form should be given directly to the supervisor.

#### Entering Outages

Each customer call will be recorded in the Outage Management System (OMS). The information entered should be entered accurately to ensure the system operates properly. The information entered will be stored as a permanent record and will be used to analyze the nature of the outages.

Should emergency situations come to your attention, please notify a supervisor. The method of this documentation will be determined.

## **12. MEDIA/PUBLIC INFORMATION GUIDE**

In order to monitor all information given to media and public sources, only the Electric Operations Manager, Northeast Florida, Manager of Communications or their designee will make press releases. If other employees are asked by media or public agencies for information, politely ask them to contact the Electric Operations Manager, Northeast Florida or Manager of Communications for the latest information.

## **13. WAREHOUSE PROCEDURE**

During an emergency, material is vital to promptly and efficiently restore service to all customers. It is therefore important to monitor all stock levels to ensure adequate supplies are on-hand and if stock levels get low, be able to quickly order additional materials.

All material taken from the storeroom or remote storeroom will have the appropriate documentation completed before being removed from the stores area. The stores personnel will ensure this is followed.

Only authorized personnel should be in the stores area. Stores personnel will monitor those in the stores area to ensure compliance.

## **14. OFFICE PROCEDURE**



This section will involve that information and other procedures necessary to ensure that the Office operation continues to operate during any emergency that may occur.

#### Annual

1. The Customer Service Manager will update information regarding the Office operations.
2. Information about the contingency plan will be updated by the Customer Service Manager each year.

#### Prior to the Emergency

1. The Electric Operations Manager and Customer Service Manager will decide on the appropriate contingency plan necessary based on the emergency situation and begin contingency operations.
2. The Customer Service Manager will ensure that protective covering is available and installed on all Office equipment and server to ensure damage, if any, is minimized.

#### After the Emergency

##### Contingency Plan #1

1. Due to the damage to the NE FL facilities, all mail and payments will go directly to the Northwest Florida office. This may not be the best alternative due to the issues with the USPS but is the most practical.
2. NW Florida personnel will process the mail using personnel as needed. Deposits will be made normally on a daily basis.
3. As soon as NE FL is capable of processing payments normally, payment processing will be handled normally.

##### Contingency Plan #2

1. Due to the inability of the Corporate Office to accept updated information from the Office, it will be necessary to send payment information to a remote location.
2. NE FL will continue to process payments normally and make deposits accordingly.
3. The IT Director will provide NE FL with the appropriate directions on where to send the information concerning payments. This information will be added to this procedure when it becomes available.
4. All information on payments will be saved to a CD on a daily basis and stored in a safe place. If possible a hard copy of the information should also be printed and stored in a safe place

### **15. Personnel Backup Contingencies**

Should the following personnel not be available during the emergencies, personnel in the positions listed below that position will fill in as needed.

Director of Electric  
Electric Operations Manager

Electric Operations Manager  
Assistant Electric Operations Manager

Propane Operations Manager  
Natural Gas Operations Supervisor

Engineering  
Technical Projects Manager

Customer Care Manager  
Customer Care Supervisor

16. EMPLOYEE ASSIGNMENTS

**TENTATIVE SCHEDULE**

<b>DAY SHIFT</b> Begin at 6:00 AM	<b>NIGHT SHIFT</b> Begin at 6:00 PM
<b><u>OFFICE</u></b>	<b><u>OFFICE</u></b>
Buddy Shelley Warren DiNapoli      Electric Operations Mgr. Curtis Boatright      Engineering Mark Cutshaw      Dir. Bus. Dev. & Roger LaCharite      Generation Greg Blazina      Customer Service Manager Mary Atkins      Dir. Propane Operations Jarvis Hunter      Engineering David Richardson      EOC Rep Linda Winston      Logistics Linda Gamble      Telephone Renee Bolyard      Telephone Rena Knight      Telephone	Patti Thornton      Customer Care Mia Goins      Supervisor Leslie Zambrano      Telephone Lynn McNeill      Logistics Shane Magnus      Engineering Jorge Puentes      Engineering Manager
	<b><u>SERVICE CREWS</u></b>
	Shannon Wagner      Crew Leader Stevie Mitchell Jr.      Apprentice
	<b><u>OFFICE/DAMAGE ASSESSOR/GUIDE</u></b>
	Jevon Brown      Telephone/Damage Assessor
<b><u>LINE CREWS</u></b>	<b><u>PROPANE OPERATIONS</u></b>
Chris Hebert      Assistant Elect Ops Mgr. Billy Clardy      Crew Leader Donnie Maxwell      Senior Lineman Randy Drake      Lineman Vacant      Lineman	Allyson Singletary      Propane Clerk Thomas Stanley      Gas Utility Worker
	<b><u>NATURAL GAS OPERATIONS</u></b>
	George Speerin      Gas Supervisor Rod Calhoun      Gas Service Tech
<b><u>SERVICE CREWS</u></b>	
Al Harris      Senior Lineman Dean Montgomery      Lineman Justin Beverly      Lineman Jeff Hindsley      IMC Tech Clint Brown      IMC Tech	<b><u>DAY SHIFT (CONTINUED)</u></b> Begin at 6:00 AM <b><u>Natural Gas Operations</u></b>  Cedric Mitchell      Service Tech
<b><u>STORES</u></b>	<b><u>PROPANE OPERATIONS</u></b>
Donna Fowler (FR)      Stores Supervisor Randy Moore (FR)      Warehouse Assistant -	Dave Pluta      Propane Supervisor James Moore      Propane Operator II Jody Montgomery      Gas Utility Worker Susan Beale      Senior Propane Clerk
<b><u>DAMAGE ASSESSORS/GUIDE</u></b>	<b><u>SAFETY</u></b>
Lewis Peacock      Damage Assessor/Guide Sarah Davis      Damage Assessor/Guide Jeff Berger      Damage Assessor/Guide	Todd Neville      Safety, Training & Compliance

17. **EMERGENCY ASSISTANCE LIST up-dated 2-4-15**

Company	Contact	Telephone	Available Resources
Southeast Electric Exchange	Scott Smith	(404) 233-1188 (404) 357-6800 cell	Crews
	Jim Collins	(404) 229-2301 cell	
FPU-Marianna	Lynwood Tanner	(850) 209-3409 cell	Crews, Tree Crews, Support
	Jerry Lewis	(850) 209-8898 cell	
ATT	Marvin Fisher	(904) 727-1544 (904) 403-1894	Engineering
	Scott Miller	(904) 407-2569 (904) 238-8263 cell	Engineering
Comcast	Mike Jackson	(904) 626-2400 1-855-962-8525..3..1..HFC	Day contact After hours answering serv.
Quantas/Dillard Smith	Brian Imsand	(423) 490-2206	Crews
Pike Electric Coop	Barry McCarthy bmccarty@pike.com	(912) 258-0645 cell (850) 632-5769 home	Crews
Public Service Commission	Rick Moses (EOC)	(850) 431-6582 (850) 408-4757 cell	Primary contact
PSC	Tom Ballinger	(850) 413-6680	Backup contact
Florida Electric Power Coord Group	Stacy Dochoda	(813) 207-7960	Crews
Mastec	Ron Martin VP Cooper Nelson	(850) 519-0639 cell (850) 519-0664	Crews
C & C Powerline	Rick Springer rick@ccpowerline.com	(904) 751-6020 (904) 759-4703	Crews
Davey	Mike Mittiga	(407) 383-0648 mobile	Tree Crews
Asplundh	Ronnie Collins	(352) 256-2370 cell	Tree Crews
JEA	Dispatcher	(904) 665-7152	Power Supply
LE Myers	Eddie Gibbins	(407) 230-3655	Crews
<b>Vehicle Repairs Assistance</b>			
Company	Contact	Telephone	Available Resources
Altec	Bobby Knittel	(352) 303-3894	Service Technician Supervisor
Altec	Bobby.knittle@altec.com	1-877-462-5832	
Altec	Matt Lynn	(904) 404-6458 (229) 375-9696	Mobile Service Tech
Dickinson Fleet	Aaron	(321)872-4187	
First Coast Fab.	Chris Wolf	(904) 849-7426	Welding And Machine Work
Maudlin International Trucks	Jerry Green Steve Brozek	(904)509-0012 (904) 783-9822	Truck repairs and Parts Asst. Service Manager
Moeller	George Moeller	(904) 415-2094	Vehicle Repairs and Welding
Napa	Brett Davis (Manager)	(904) 261-4044	Parts and Tools
Power Pro-Tech	Jimmy Evans	(800) 437 4474	Generator Repairs
Generator & HVAC Service	James Stamper  <b>Onsite Emergency</b>	1-800-437-4474 321-274-8578 <b>888-218-0298</b> <b>678-566-2439</b>	8 <sup>th</sup> and Lime locations  <b>780 Amelia Island Pkwy</b>
Tiresoles	Pete Shannon Pat Demianenko	(904) 378-0090 Cell (904) 536-6460	Main Office Operations Manager

**18. EMERGENCY STOCK REQUIREMENTS**

See next 4 pages

Bin#	Description	Qty Required	Qty On Hand	Order *
31-1065	WIRE,#8 BARE SOL SD CU TIE WIRE (SPOOL)	1000	2500	---
31-1095	WIRE,#6 CU SD SOLID POLY,TX RISER WIRE (SPOOL)	1000	750	3000
31-1115	WIRE,#4 BARE SOL CU SD OH (SPOOL)	1000	990	2000
31-1310	WIRE,#4 AL OH SOFT TIE (SPOOL)	1000	2616	---
31-1350	WIRE,1/0 BARE STD AL OH (AZUSA)	1000	10535	---
31-1410	WIRE,4/0 BARE STD AL OH (ALLIANCE)	1000	23686	---
31-1460	WIRE,396.4 BARE STD AL OH (CANTON)	1000	12625	---
31-1470	WIRE,#477 BARE STD AL OH (COSMOS)	1000	5564	---
31-1475	WIRE,#636 BARE STD AL OH (ORCHID)	1000	9742	---
31-1479	WIRE,#2 AL DUPLEX OH (DOBERMAN/XLP)	1000	9500	---
31-1480	WIRE,#6 AL DUPLEX OH (COIL)(SHEPPARD)	600	1850	---
31-1580	WIRE,1/0 TRIPLEX OH (COIL)(GAMMARUS)	1000	3000	4000
31-1585	WIRE,1/0 TRIPLEX OH (REEL)(GAMMARUS)	1000	5650	---
31-1610	WIRE,4/0 STD TRIPLEX AL OH (LAPAS)	500	1125	---
31-1660	WIRE,1/0 QUAD AL OH (SHETLAND)	200	990	---
31-1715	WIRE,GUY 3/8 BEZINAL COATED	1000	2500	---
33-1030	WIRE,#2 AL URD 15KV	3000	6960	---
33-1050	WIRE,4/0 INS STD AL URD 15KV	6000	11230	---
33-1070	WIRE,750MCM AL URD 15 KV	3000	5292	---
35-1040	ANCHOR SCREW 5' X 10"	10	61	---
35-1050	ANCHOR SCREW 8' X 10"	10	37	---
35-1145	ARRESTOR,LIGHTNING,SILICONE 9 KV	20	64	---
35-2060	BRACKET, MOUNTING, AL ONE CUTOUT & ARRES.	20	24	30
35-2065	BRACKET,MOUNTING,AL	20	40	---
35-2075	BRACKET, SINGLE INSUL, FIBERGLASS, HORIZ	20	39	---
35-2080	BRACKET,MOUNTING,AL HEAVY DUTY	10	15	---
35-2310	CLAMP,GROUND ROD 5/8"	20	269	---
35-2650	COUPLING GROUND ROD 5/8, CU CLAD(NON-THREAD)	50	157	100
35-2661	COVER,SERVICE SLEEVE #C2	200	810	---
35-2662	COVER,H-TAP #C5	200	362	200
35-2663	COVER,H-TAP #C7	200	238	200
35-2716	CUTOUT,SILICONE,SEACOAST	50	56	42
35-2717	FUSEHOLDER,200A CUTOUT	20	26	---
35-2718	FUSEHOLDER,100A CUTOUT	10	11	25
35-2835	GUARD,LINE 336.4 MCM AL OR ACSR	30	61	---
35-2840	GUARD,LINE 477 MCM AL OR ACSR	30	49	---
35-2855	GUARD,SQUIRREL	10	60	25

35-3014	INSULATOR,UPRIGHT 35 KV SILICONE	30	100	48
35-3025	INSULATOR,HORIZ MOUNT 35KV SILICONE INT BASE	60	71	96
35-3040	INSULATOR,POST TYPE 88KV W/CLAMP	12	20	---
35-3085	INSULATOR,SUSPENSION SILICONE 25 KV	20	31	36
35-3120	INSULATOR,GUY STRAIN 8 FT	10	13	20
35-3121	INSULATOR,GUY STRAIN 8 FT 36000 LB	10	105	---
35-3245	MOUNT,TX,BRACKET, SINGLE PHASE	10	25	---
35-3260	MOUNT,TX CLUSTER AL ABOVE 3-50KVA	4	6	---
35-3520	POLE,30 CL 6 CP	15	18	
35-3530	POLE,35 CL 4 CP	10	14	5 day
35-3545	POLE,40 CL 3 PP	10	13	
35-3550	POLE,40 CL 1 PP	15	19	
35-3575	POLE,45 CL 3	15	9	---
35-3579	POLE,45 CL H1	5	5	---
35-3590	POLE,55 CL H1	1	6	---
35-3760	ROD-GROUND COPPER CLAD 5/8" X 8' NON- THRD	30	404	---
35-3945	SWITCH,UNDERSLUNG	6	8	---
35-3946	SWITCH,INLINE	6	14	---
37-1000	CLAMP,DEADEND,#6-#4 AL SERVICE WEDGE	20	181	---
37-1020	CLAMP,DEADEND,#2-1/0 AL SERVICE WEDGE	40	88	200
37-1040	CLAMP,DEADEND,4/0 AL SERVICE WEDGE	40	147	200
37-1250	CLAMP,PARA GR #2 STD AL	50	181	---
37-1260	CLAMP,PARA GR #1/0 STD AL W/SS BOLTS	50	187	---
37-1270	CLAMP,PARA GR 4/0 STD AL	50	88	---
37-1290	CLAMP,PARA GR 350-477 AL OR 336-397 ACSR	50	120	---
37-1380	CONN,H-TYPE (WR9)	50	287	---
37-1390	CONN,H-TYPE (WR159)	100	247	---
37-1400	CONN,H-TYPE (WR189)	100	200	200
37-1415	CONN,H-TYPE (WR259)	100	150	200
37-1420	CONN,H-TYPE (WR379)	100	539	---
37-1425	CONN,H-TYPE (WR399)	100	264	250
37-1430	CONN,H-TYPE (WR419)	100	79	100
37-1455	CONN,H-TYPE (NB500-40)	30	224	---
37-1456	CONN,H-TYPE (NB500)	30	126	---
37-1620	CONN,WISE ACTION #6 CU	100	593	---
37-1630	CONN,WISE ACTION #4 CU	100	202	400
37-1640	CONN,WISE ACTION 6 SOL-#2 SOL CU	100	702	300
37-1650	CONN,WISE ACTION 2 SOL-#2 STD CU	100	522	500
37-1660	CONNECT-WISE ACTION 2/0 SOL -1/0 STD CU	100	206	450
37-1670	CONN,WISE ACTION 1/0 SOL-4/0 STD CU	100	101	350
37-1710	CONN,URD FLOOD SEAL 4 POSITION	30	38	---
37-1713	CONN,TX,OH,6 POSITION	25	166	---

37-1770	DEADEND,AUTOMATIC SS #2 STD CU	20	132	---
37-1780	DEADEND,AUTOMATIC SS 1/0 STD CU	20	48	---
37-1785	DEADEND,AUTOMATIC SS 2/0 STD CU	10	87	---
37-1790	DEADEND,AUTOMATIC SS 4/0 STD CU	20	107	---
37-1800	DEADEND,AUTOMATIC SS #2 STD AL	20	100	---
37-1810	DEADEND,AUTOMATIC SS 1/0 STD AL	20	56	---
37-1840	DEADEND,AUTOMATIC SS 4/0 STD AL	20	31	---
37-1850	DEADEND,AUTOMATIC SS 394.6 AL	20	82	---
37-1855	DEADEND,AUTOMATIC SS 477 AL	20	68	---
37-1891	DEADEND,FULL TENSION,COMP477 AL W/2 HOLE LUG	15	44	---
37-1892	DEADEND,FULL TENSION,COMPRESSION 636	15	18	---
37-1970	LUG,TERM,URD 2/0 AL 2-HOLE	50	100	---
37-1980	LUG,TERM,URD 4/0 AL 1-HOLE	50	222	---
37-2120	SLEEVE,AUTO SPLICE #8 STD-#6 SOL CU	20	64	---
37-2130	SLEEVE,AUTO SPLICE #6 STD-#4 SOL CU	20	59	---
37-2141	SLEEVE,AUTO SPLICE #2 STD CU	20	255	---
37-2161	SLEEVE,AUTO SPLICE 1/0 CU	20	241	---
37-2190	SLEEVE,AUTO SPLICE 4/0 STR CU	20	44	---
37-2340	SLEEVE,SERVICE 2/0-2/0 AL/ACSR (IKL47)	100	106	100
37-2350	SLEEVE,SERVICE 4/0-1/0 AL (IKL66)	100	178	---
37-2360	SLEEVE,SERVICE 4/0-2/0 AL (IKL67)	100	122	100
37-2370	SLEEVE,SERVICE 4/0-4/0 AL (IKL69)	100	133	---
37-2375	SLEEVE,SERVICE 350-350 AL	50	111	---
37-2430	SLEEVE,FULL TENSION #2 STD AL	20	256	---
37-2450	SLEEVE,SERVICE FULL TENSION 1/0 STD AL	20	195	---
37-2480	SLEEVE,PRIMARY FULL TENSION 4/0 AL	20	113	---
37-2515	SLEEVE,PRIMARY FULL TENSION 397.5(396.4)	20	29	---
37-2530	SLEEVE,PRIMARY FULL TENSION 477 AL	20	47	---
37-2535	SLEEVE,PRIMARY FULL TENSION 636 AAC	20	65	---
37-2665	SPLICE KIT,URD 15KV #2 STD AL	12	58	---
37-2670	SPLICE KIT,URD 15KV-2/0 AL	17	43	---
37-2680	SPLICE KIT,URD 15KV-4/0 AL	12	36	---
37-2690	SPLICE KIT,URD 15KV 750 AL	12	35	---
37-2820	TERMINAL,PIN #2STD AL	50	116	300
37-2830	TERMINAL,PIN 1/0 STD AL	50	220	---
37-2835	TERMINAL,PIN 2/0 STD AL	50	31	20
37-2840	TERMINAL,PIN 4/0 STD AL	50	80	---
37-2845	TERMINAL,PIN 350 AL	10	59	---
37-2850	TERMINAL,PIN 500 AL	10	64	---
39-1220	FUSE LINK 7 AMP QA	75	117	50
39-1240	FUSE LINK 15 AMP QA	50	167	---
39-1260	FUSE LINK 25 AMP QA	50	117	50
39-1270	FUSE LINK 30 AMP QA	75	137	---

39-1290	FUSE LINK 50 AMP QA	75	180	25
39-1320	FUSE LINK 75 AMP QA	25	69	25
39-1330	FUSE LINK 100 AMP QA	25	73	---
41-1114	KITS,TERM OH FOR 2/0 AL	10	38	---
41-1115	KITS,TERM OH FOR #2 AL	20	20	10
41-1120	KIT,TERM SILICONE FOR #2 AL	10	29	---
41-1125	KIT,TERM OH,SILICONE FOR 4/0 AL	20	27	---
41-1148	ELBOW,LOAD BREAK TERMINATOR #2 W/TEST POINT	20	64	---
41-1150	ELBOW,LOAD BREAK, URD, 2/0 AL,15KV W/TEST POINT	10	34	---
41-1160	TERMINATOR,LOAD BREAK 4/0 W/TEST POINT	20	107	---
41-1195	STRAP,MOUNTING,TERMINATOR,#2,2/0 & 4/0	50	67	---
41-1200	VAULT,SECONDARY,PEDESTAL	6	26	12
N/S	#2 Extended Repair Elbows	12	OK	---
N/S	#2/0 Extended Repair Elbows	12	OK	---
N/S	#4/0 Extended Repair Elbows	12	OK	---
N/S	EXTENDED SPLICE REPAIR KIT,#2 STR,3M QS II	5	6	---
N/S	EXTENDED SPLICE REPAIR KIT,2/0,3M QS II	10	14	---
N/S	EXTENDED SPLICE REPAIR KIT,4/0,3M QS II	5	8	---
NS 35-1185	ATTACHMENT,DOWN GUY	20	20	50
NS 35-1186	ATTACHMENT,DOWN GUY (POLE PLATE) WOOD 35MLB	10	OK	---
NS 35-1187	ATTACHMENT,DOWN GUY CONCRETE 35MLB	10	OK	---
NS 35-1350	BOLT,DOUBLE ARMING,GALV 5/8 X 18	30	OK	---
NS 35-1360	BOLT,DOUBLE ARMING,GALV 5/8 X 20	20	OK	---
NS 35-1430	BOLT,DOUBLE ARMING,GALV 3/4 X 22	20	OK	---
NS 35-1480	BOLT,DOUBLE UPSET,GALV 5/8 X 12	20	OK	---
NS 35-1640	BOLT,MACHINE,GALV 5/8 X 10	100	70	100
NS 35-1650	BOLT,MACHINE,GALV 5/8 X 12	100	20	200
NS 35-1660	BOLT,MACHINE,GALV 5/8 X 14	100	190	---
NS 35-1800	BOLT,MACHINE,GALV 3/4 X 20	50	OK	---
NS 35-1810	BOLT,MACHINE,GALV 3/4 X 22	50	OK	---
NS 35-1820	BOLT,MACHINE,GALV 3/4 X 24	50	OK	---
NS 35-1850	EYELET, 3/4" HOLE	50	75	400
NS 35-2245	CLAMP SUPPORT FOR #2,1/0,4/0 CU	50	OK	---
NS 35-2255	CLAMP SUPPORT FOR #2,1/0,4/0 AL	50	OK	---
NS 35-2265	CLAMP SUPPORT 394.6-477 AL	50	OK	---
NS 35-2375	CLEVIS,SECONDARY EXTENSION	20	OK	---
NS 35-2780	EYELET,THIMBLE ANGLE 5/8"	20	OK	25
NS 35-2895	GUY GRIP,3/8", BEZINAL COATED (352895)	100	10	200
NS 35-3130	LAG SCREW - 1/2"X4" GALV.	150	500	---
NS 35-3290	NUT EYE,GALV 5/8	30	30	50
NS 35-3300	NUT EYE,GALV 3/4	30	OK	---

NS 35-3320	NUT, THIMBLE EYE 5/8	20	OK	---
NS 35-3881	STRAP, CONDUIT OR PIPE 2" STAINLESS STEEL	40	OK	100
NS 35-3886	STRAP, CONDUIT OR PIPE 3" STAINLESS STEEL	40	OK	---
NS 35-3970	TAPE, SCOTCH #23-2	20	OK	---
NS 35-4020	TAPE, VINYL	50	OK	400
NS 35-4030	THIMBLE, GUY WIRE 3/8	200	OK	---
NS 35-4335	WASHER, DOUBLE COIL 5/8"	200	OK	---
NS 37-1865	DEADEND, AUTO, SLIDE OPENING WEDGE #4-4/0	50	OK	---
NS 37-1868	DEADEND, AUTO, SLIDE OPENING WEDGE 4/0-600	50	OK	---
	Transformer, Pad Mount 100 KVA	7	6	
	Transformer, Pad Mount 50 KVA	7	12	
	Transformer, Pad Mount 75 KVA	7	6	

\*As of 5/5/10

**19. TRANSPORTATION AND COMMUNICATION EQUIPMENT**

Unit #	Tag / Mo.	Year	Model	Body Type	Dept. Code	Employee	comments
691A	GBP243	1982		Trailer	EL451	Reel Trailer	
692A	GBP172	1982		Trailer	EL451	Reel Trailer	
705A	GBP174	1992		Trailer	EL452	Equipment Trailer	
708A	GBP225	1998		Trailer	EL452	Equipment Trailer	
740	GBP672	1995	4700	Bucket	EL452	Parrish Kildow	
747	GBP673	1998	4800	Bucket	EL451	Donnie Maxwell	
754	GBP383	1999		Trailer	EL451	Reel Trailer	
755	GBP444	1999		Trailer	EL451	Reel Trailer	
763A	GBC971	2000		Trailer	EL452	Equipment Trailer	
785	GBF903	2001		Trailer	MK412	BBQ Trailer	
786	GBC996	2002		Trailer	EL451	Lawn Maint. Trailer	
790	GBP173	2003	CZ12KP	Trailer	EL451	Pole Trailer	
792	GBP902	2004	4300	Bucket	EL452	Steve Taylor	
795	K413CK	2006	Trail Blazer	SUV	CS411	Customer Service	
796	T004DR	2006	Silverado	Pickup	EL451	On-Call	
798	GA4363	2005	7400	Digger Derrick	EL452	Poles and transformers	
804	GBP667	2008	4300	Bucket	EL451	Billy Clardy	
810	GBP661	2011	4300	Bucket	EL451	Electric Line	
812	GBC945	2010	Ranger	Comp. P/U	EN450	Randy Moore	
813	693NVX	2010	F-150	Pickup	EL450	Jorge Puentes	
814	694NVX	2010	F-150	Pickup	EL451	Curtis Boatright	



817	GBC976	2011	Ranger	Comp. P/U	EL452	Lewis Peacock	
818	GBC974	2011	Ranger	Comp. P/U	EL452	Jeff Burger	
819	GBC980	2011	Ranger	Comp. P/U	EL452	Sarah Davis	
820	GBC973	2011	Ranger	Comp. P/U	EL452	Jevon Brown	
821	GBC988	2011	F-350	Utility	EN450	NW Electric	
822	GBC957	2012	F-550	Utility	EL451	Shannon Wagner	
824	W396YD	2012	Escape Hybrid	SUV	MK412	David Richardson	
825	GA1943	2012	M2-106	Bucket	EL451	Al Harris	
826	BMDJ06	2013	Explorer	SUV	GM440	Mark Cutshaw	
827	BMDJ20	2012	F-150	Pickup	EN450	William Grant	
828	BMDJ19	2012	F-150	Pickup	EL451	Chris Hebert	
829	GBC970	2013	F-150	Pickup	EN450	Electric Call Truck	
830	T005DR	2013	Fusion	Sedan	CS411	Roger LaCharite	
831	GBF938	2013	F-250	Utility	EN450	Jeff Hindsley	
832	GA9255	2013	M2-106	Bucket	EL451	Spare	
833	GA9256	2014	M2-106	Digger Derrick	EL451	Spare	
834	GBC968	2013	185DPQ	Trailer	EL451	Air Compressor	
999	EJLV47	2015	F-150 4x4	Pickup	SM711	Todd Neville	
155	GBU483	2004	F550	Utility Welder	OP450	NE Gas Ops Spare	
213	GBC953	2010	Express 2500	Van	OP450	NE Gas Ops On-Call	
229	GBF936	2013	F-150	Pickup	OP450	George Speerin	
823	GBC883	2012	F-550	Utility	OP450	Dave Pluta	
787	GA4431	2002	4300	Bobtail	PR450	Spare	
793	GBQ063	2005	BC/M2	Bobtail	PR450	Thomas Stanley	
797	GBZ814	2006	F550	Utility	PR450	James Moore	
803	GA0302	2008	4300	Bobtail	PR450	Jody Montgomery	
805	GBC966	1982		Trailer	PR450	Equipment Trailer	
806	GBC897	2000	HSE16	Trailer	PR450	Equipment Trailer	
807	GBF941	2001	F550	Utility	PR450	On-Call Truck	
815	GBZ807	2006	RF6101	Trailer	PR450	Equipment Trailer	
		2007		Forklift	WH450		
		2012		Forklift	WH450		
		1994		Generator	EL451		
		2001		Excavator	EL452		
		2009		Mower	EL451		
		2006		Generator	PR450		
		2000		Compress	PR450		
		2001		Trencher	PR450		

**20. CRITICAL CUSTOMER LIST**

**A. Hospitals, Clinics, Nursing Homes**

<u>Name</u>	<u>Address</u>	<u>Telephone</u>	<u>Contact Person</u>
Baptist Medical Center - Nassau	1700 East Lime St	321-3500 (main)	Wayne Arnold
Care Centers of Nassau	95146 Hendrix	261-5518 753-3575 Home	Patrick Kennedy
Quality Health	1625 Lime St	261-0771 225-2351 (Answer service)	Steve Jordan
DaVita (Dialysis)	1525 Lime St, Suite 120	491-1998	Jackie Pelfrey
Nassau County Health Dept.	30 South 4 <sup>th</sup> St.	548-1860 or 548-1800	
Savannah Grand	1900 Amelia Trace Ct.	321-0898 Cell 206-2774	Renee Stoffel
Home 321-3478			
Osprey Village	76 Osprey Village Dr.	277-3337 x11 Cell 753-2435	Dana Sargent
Jane Adams House	1550 Nectarine St	261-9494 Cell 583-3526	Jeanett Adams

**B. Public Utilities & Major Resorts**

<u>Name</u>	<u>Address</u>	<u>Telephone</u>	<u>Contact Person</u>
Fernandina Waste Water/Water	1007 South 5 <sup>th</sup> St	277-7380 Ext. 224 753-1412 (cell)	John Mandrick
Nassau Utilities	5390 First Coast Hwy	530-6450 753-2989 261-9452	Danny White After Hours
JEA Dispatch		904-665-7152	
Florida Power and Light		(800) 226-3545	Main Number
Comcast		904-374-7600	
ATT	1910 S. 8 <sup>th</sup> St	727-1544 (904) 403-1894 407-2569 (904) 238-8263(cell)	Marvin Fisher Scott Miller
AIP – Security		277-5914 491-4445	Alan Barker
Ritz Carlton		277-1100 753-2122 cell	Tom Gagne

**C. Major Disaster Shelters & Hotels**

<u>Name</u>	<u>Address</u>	<u>Telephone</u>	<u>Contact Person</u>
Yulee Elementary	86083 Felmore Rd.	225-5192	
Yulee High School	85375 Miner Rd.	225-8641	
Yulee Middle School	85439 Miner Rd.	491-7944	
Yulee Primary	Goodbread Road	491-7945	
Hilliard Schools			
Callahan Schools			
Bryceville Elementary School			

**See page 34 of this document for a storm shelter map.**

Nassau Holiday	Hwy 17, Yulee	225-2397
Amelia Hotel	1997 So. Fletcher Ave	261-5735
Amelia South Condo's	3350 So. Fletcher Ave	261-7991
Beachside Motel	3172 So. Fletcher Ave	261-4236
Elizabeth Pointe Lodge	98 So. Fletcher Ave.	277-4851
Days Inn	2707 Sadler Road	277-2300
Hampton Inn	2549 Sadler Road	321-1111

Residence Inn	2301 Sadler Road	2772440
Holiday Inn	76071 Sidney Place	849-0200
Hampton Inn (downtown)	19 South 2nd St	491-4911
Comfort Suites	2801 Atlantic Ave.	261-0193

**D. Municipal and State Emergency Services**

<u>Name</u>	<u>Address</u>	<u>Telephone</u>	<u>Contact Person</u>
Florida Highway Patrol	Jacksonville	695-4115	Keith Gaston
American Red Cross	NE Chapter	358-8091	
Fernandina Police Dept.	Lime St.	277-7342	Dispatcher
Dept. of Transportation	Jacksonville	360.5400	
HAZ MAT – Chemtrec (free hotline)		800-424-9300	
Chlorine Institute		1-703-741-5760	

**E. Communication and Broadcasting Services**

<u>Name</u>	<u>Address</u>	<u>Telephone</u>	<u>Contact Person</u>
WOKV Radio		245-8866	
		Cell 718-7503	
WQIK Radio		636-0507	
WAPE Radio		245-8500/01	

**F. Major Food Storage/Processing Facilities**

<u>Name</u>	<u>Address</u>	<u>Telephone</u>	<u>Contact Person</u>
Publix Super Market	1421 So. 14 <sup>th</sup> St	277-4911	
Winn Dixie Stores	1722 So. 8 <sup>th</sup> St	277-2539	
Hedges Meat Shoppe	Hwy 17 South	225-9709	
Winn Dixie (Yulee)	22 Lofton Sq	261-6100	
Harris Teeter	4800 1st Coast Hwy	491-1213	
Super Wal Mart	SR 200	261-9410	

**G. Correction Facilities**

<u>Name</u>	<u>Address</u>	<u>Telephone</u>	<u>Contact Person</u>
Nassau House	1781 Lisa Ave.	277-4244	

**H. Airports**

<u>Name</u>	<u>Address</u>	<u>Telephone</u>	<u>Contact Person</u>
McGill Aviation Inc.	F.B. Airport	261-7890	Sean McGill

**G. News Media**

<u>Name</u>	<u>Address</u>	<u>Telephone</u>	<u>Contact Person</u>
Fernandina News Leader		261-3696	Fax 261-3698

**21. Emergency Telephone List**

- A. Telephone Repair**  
 AT & T (904) 403-1894 Marvin Fisher  
 (904) 238-8263 Scott Miller  
 Comcast (Cabling & repair) (904) 626-2400 cell (Day) Mike Jackson  
 1-855-962-8525 (After hours)
- B. Cell Phones**  
 IT (302) 736-7810 Joe Abba
- C. Jacksonville Electric Authority**  
 800-683-5542  
 Dispatcher (904) 665-4806  
 Dispatcher Supervisor (904) 887-1811 Matt Seeley  
 Storm Coordinator (904) 665-7145 Garry Baker  
 (904) 665-7110 Ricky Erixton  
 SOC (System Operation Center) (904) 665-4806  
 SWITCHING ACTIVITY (all) (904) 277-1478 TURBINE OPERATOR
- D. Emergency Management**  
 Nassau County (904)548-4980 Bill Estep
- E. Law Enforcement - 911**  
 Nassau County 225-0331 Sheriff – Bill Leeper  
 F.B. City 277-7342 City Police Chief – James Hurley
- F. Ambulance - 911**
- G. News Media**  
 WJWB-Channel 17 Jacksonville 641-1700 Fax 642-7201  
 WJXT-Channel 4 Jacksonville 399-4000 Fax 393-9822  
 WTLV-Channel 12 Jacksonville 633-8808 Fax 633-8899  
 WTEV-Channel 47 Jacksonville 564-1599 Fax 642-5665
- H. Nassau County Officials**  
 Billy Estep 548-0900 Nassau County EOC Director  
 Ted Selby - County Manager 530-6010 Nassau County  
 Nassau County Office 530-6010  
 Steve Kelly County Commissioner  
 Walter Boatright County Commissioner  
 Danny Leeper County Commissioner  
 George Spicer County Commissioner  
 Pat Edwards County Commissioner
- I. Fernandina Beach Officials**  
 Johnny Miller – City Mayor (W) 556-3299  
 Dale Martin - City Manager (W) 277-7305 or 310-3100  
 Ty Silcox - City Fire Chief (W) 904-277-7331  
 James Hurley - City Police Chief (W) 277-7344  
 Johnny Miller 556-3299 Mayor (City FB)  
 Robin Lentz 206-0122 Vice Mayor (City FB)  
 Tim Poynter 415-6533 City Commissioner  
 Len Kreger 432-8389 City Commissioner  
 Roy Smith 556-0951 City Commissioner

J. **Public Service Commission**

Director (800) 342-3552  
Director (850) 413-6802  
Mark Futrell-Director (850) 413-6692

K. **Generator Repair**

See Emergency Assistance List Section 17.

L. **FPUC NE Substations**

Stepdown 277-1974  
JL Terry 277-1973  
AIP 277-1975

**22. LOGISTICS**

**Motels:**

Amelia Hotel	261-5735	1997 South Fletcher Ave,
Nassau Holiday Motel	225-2397	U.S. 17 South
Amelia South Condo.	261-7991	3350 So. Fletcher Ave.
Elizabeth Point Lodge	277-4851	98 So. Fletcher Ave.
Days Inn	277-2300	2707 Sadler Road
Hampton Inn	321-1111	2630 Sadler Road
Hampton Inn Downtown	491-4911	19 South 2 <sup>nd</sup> Street
Comfort Inn	261-0193	2801 Atlantic Ave.
Country Inn	225-5855	462577 SR 200
Residence Inn	277-2440	2301 Sadler

**Restaurants:**

Baxter's	277-4503	4919 1 <sup>st</sup> Coast Hwy
Beach Diner	310-3748	2006 South 8 <sup>th</sup> Street
Florida House	491-3322	22 South 3 <sup>rd</sup> Street
Barbara Jean's	277-3700	960030 Gateway Blvd.
Chili's	225-8666	SR 200

**Food Stores:**

Harris Teeter's	491-1213
Publix	277-4911
Winn Dixie	277-2539
Winn Dixie (Yulee)	261-6100
Super Walmart	261-9410

**Cellular Phones:**

Verizon call Joe Abba IT (302) 736-7810

**Water Supply:**

City of Fernandina Water  
Nantze Springs Water Co. 800-239-7873

**Ice Supply:**

Winn Dixie	277-2539
Publix	277-4911
Wal Mart	261-5306 (Island) or 261-9410 (Yulee)

**Service Stations:**

Flash Foods Store's 261-6563

**Vehicle Repair Facilities:**

Continental Auto Truck	904-797-2665 (24/7)
Altec Industries Inc	(561) 686-8550 West Palm Beach

**Rental Equipment**

United Rental (904)404-7471

**Flashlights (20 w/batteries):** Quantity on hand  
**Portable AM/FM Radios w/batteries:** Walmart (Additional) 261-5306 (Island) or 261-9410 (Yulee)

### **23. SERVICE PLAN TO SUPPLY POWER TO FPU OFFICES**

During an emergency it is imperative that power be restored to the office/complexes located at 780 Amelia Island Parkway as soon as possible. Also of the utmost importance is to ensure the feeder to the building is maintained in optimum working order at all times. This includes tree trimming, replacing deteriorated poles, replacing defective equipment, etc.

The Operations Center at 780 Amelia Island Pkwy is served from an underground feeder #312 from Stepdown Substation. If power is lost, a gas powered total building generator will provide backup service until the problem is resolved. If required, downstream switches should be opened so that power may be restored to the office as soon as possible.

#### Situation 1:

Terry Substation energized. Feeder OCB# 214 disabled. Ride line to determine the location of the fault. If extensive, open dead end jumpers as far from the substation as possible to maintain service to the office at 911 S. 8<sup>th</sup> Street.

#### Situation 2:

Stepdown Substation energized. Open OCB# 214 at Terry Substation and open OCB# 310 at Stepdown Substation, close pole switch number 780 at Clinch Drive and Bonnieview Road. Close OCB# 310. Feeder OCB# 310 should hold the load, if not, shed some load.

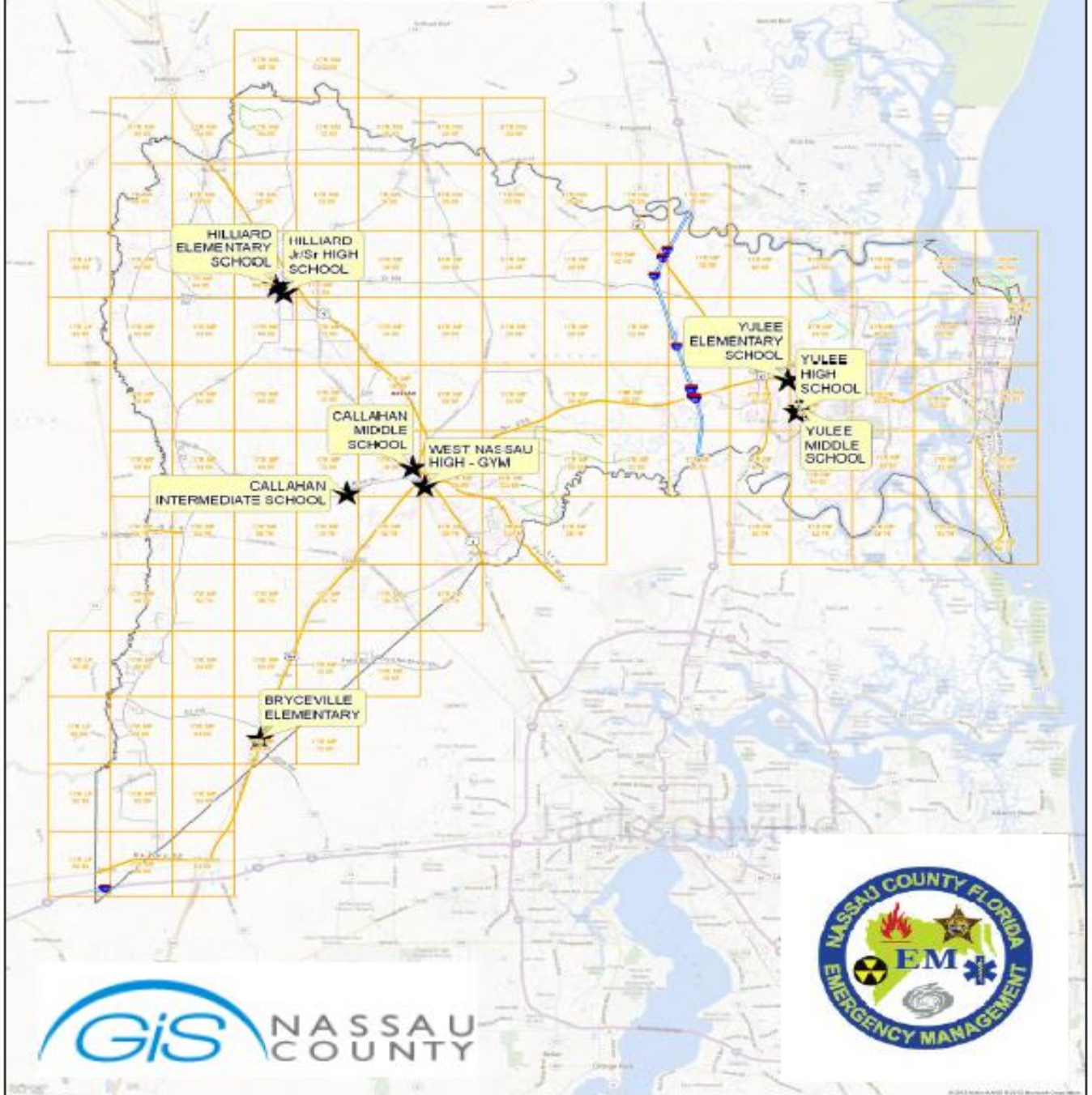
### **24. POST-STORM DATA COLLECTION AND FORENSIC ANALYSIS**

FPUC will employ contractors to perform both the post-storm data collection and forensics analysis should a significant storm occur. The contractors will be provided with system mapping information and requested to collect post-storm damage information on areas as defined by the company. The areas will be selected in order to survey the areas in which the most damage occurs in order to gain the most information.

Damage will be identified so that the cause of the outage is identified as it relates to trees, wind, debris, conductor failure, pole failure, etc. which will be identified on the map. Depending upon the degree of damage, forensic analysis may be collected during this process. However, if the damage is extensive the forensics analysis will be performed as soon as possible after the post-storm data collection is completed.

Data collected during the collection process will be analyzed after completion of all storm related work has been completed. This analysis will summarize the type damage and failure modes of outages in order to determine methods to improve reliability in the future.

# Nassau County Florida Schools Statewide Emergency Shelter Plan



★ Nassau County Schools



US National Grid  
100,000-m Square ID  
LQ | MQ  
LP | MP  
Grid Zone Designation  
**17R**  
Datum = NAD 1983, 1,000-m USNG

Mag. Declination  
5° 41' 24"W  
Changing by  
4' W per yr  
Date 2009  
To Convert a  
Magnetic Azimuth  
to a Grid Azimuth  
SUBTRACT G-M Angle



G-M Angle  
5° 41' 12"  
Grid Convergence  
1° 16' 46"  
To Convert a  
Grid Azimuth  
to a Magnetic Azimuth  
ADD G-M Angle

***FLORIDA PUBLIC UTILITIES  
COMPANY***



***NORTHWEST FLORIDA  
DIVISION***

***2016  
EMERGENCY PROCEDURES***

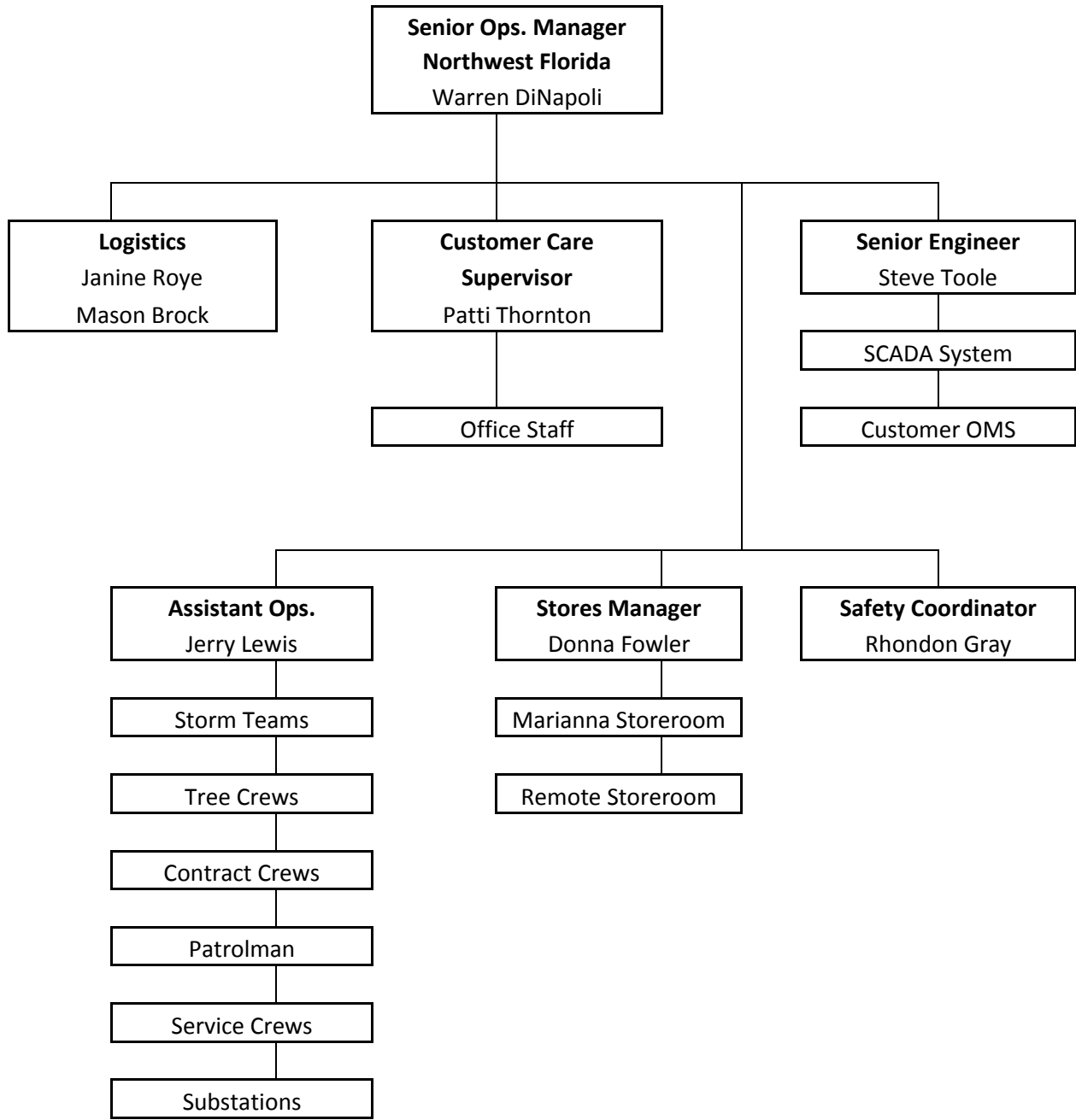


## **1. OBJECTIVE**

The primary objective of the procedure is to provide guidelines under which the Northwest Florida Division of Florida Public Utilities Company will operate in emergency conditions. The following objectives will ensure orderly and efficient service restoration.

- A. The safety of employees, contractors and the general public will have the highest priority.
- B. Early damage assessment is required in order to develop manpower requirements.
- C. Request additional manpower as soon as conditions and information indicate the need.
- D. Provide for orderly restoration activities in order to provide efficient and rapid restoration.
- E. Provide all logistical needs for employees and contractors.
- F. Provide ongoing preparation of our employees, buildings, equipment and support function in advance of an emergency.
- G. Provide support and additional resources for employees and their families should they need assistance to address injury or damage as a result of the emergency situation.

**2. ORGANIZATIONAL CHART**



### **3. EMERGENCY PERSONNEL POLICY**

As a public utility we provide essential services for our customers and the general public. Therefore, the purpose of the Company's Emergency Personnel Policy is to encourage employees to make every reasonable effort to report to work. Each employee performs an essential role in the Company's operation and it's important that you report to duty as scheduled during an emergency. Restoring and maintaining services after a major storm is a difficult job and requires everyone's best efforts. Of necessity, employees may be required to assist other departments or perform functions outside of their normal daily work assignment. It will take every employee's cooperation before, during and after an emergency.

- A. If you are on the job when the storm approaches, your supervisor will inform you of your storm assignment. Employees not directly involved in maintaining services may be released to go home before the storm threatens safe travel.
- B. If you are off-duty, call your immediate supervisor as soon as possible after an emergency condition is announced. An Emergency Condition Warning is usually given within 24 hours of occurrence. Your supervisor will inform you as to where and when you'll be needed prior to, during, and after the storm. If your supervisor is not available call his/her immediate supervisor or the Northwest Florida Office. This requirement applies to all electric division employees when an emergency threatens any of the Company's electric service area.
- C. During an emergency, the company will maintain a small workforce to monitor the emergency and address emergency conditions that may exist. This workforce will be located at a safe location and work closely with the Counties served EOCs. The company will determine what workforce is required and will consider utilizing those employees who volunteer for this type of work. The Operations Manager, Senior Engineer, Asst. Operations Manager will form the basis of this group. Other employees will be included based on the severity and timing of the emergency.
- D. All employees are strongly encouraged to have a personal evacuation plan and know what to do during an emergency condition that impacts the service area. The plan should take into consideration the magnitude of the emergency and the significance of the actions that may be necessary. The plan should ensure that the employee and their family are safely out of harm's way while still allowing the employee to respond as required when the emergency conditions subside to a manageable level.
- E. The company plans to move much of the transportation equipment to separate locations to ensure one event does not cause damage to the fleet. Employees are encouraged to volunteer to take certain vehicles with them prior to the emergency and use them to return to work as soon as possible after the emergency conditions subside to a manageable level. The company will determine how the transportation equipment is distributed among the volunteer employees.
- F. After the emergency passes, all personnel not on duty during the storm will report as soon as possible to their supervisor or his/her designate by telephone. In the event the telephones are not working or you are unable to communicate with your supervisor or the company office, report in person to your regular work station as soon as possible during daylight hours.
- G. EMPLOYEES ARE TO MAKE EVERY REASONABLE EFFORT TO REPORT TO WORK. IT'S UNDERSTOOD THAT THERE WILL BE INSTANCES WHERE EMPLOYEES JUST CAN'T GET TO WORK. IF YOU ARE UNABLE TO REPORT TO WORK MAKE EVERY EFFORT TO CONTACT YOUR SUPERVISOR TO REPORT YOUR ABSENCE.
- H. Personal emergencies are a common result of a major hurricane, but unless approved by your Supervisor, will not be acceptable as an excuse for not reporting to work. Evacuation from a hurricane threatened area to a remote location from which you cannot promptly return to your home is also not acceptable as a reason for not reporting to work.
- I. The Company will endeavor to provide assistance and shelter to employees and their immediate families should an employee need or request assistance.

- J. Unless emergency conditions warrant, employees will not be required to work in excess of sixteen (16) consecutive hours.

The success of the emergency plan requires the cooperation and efforts of all of our employees. Employees may be required to return from their vacation or Company sponsored travel. Therefore, it will be the responsibility of each supervisor to determine the location of each of their employees on Company sponsored trips to facilitate their recall if conditions warrant their return when the emergency plan is implemented. Employees who are on vacation will notify, by telephone, their supervisors of their location and availability when an emergency threatens to strike our service area. Supervisors will consult with their department head to determine the feasibility and need to recall employees from vacation or Company sponsored trips. All employees are essential for the continued operation of the Company obligations and Company objectives.

The Company will develop information which will assist employees and their families before, during and after the storm. The General Manager, Northwest Florida will be responsible for obtaining the information and communicating this information to the employees. The Company will attempt to provide assistance to the employees and their families during emergency situations if needed.

#### **4. GENERAL RESTORATION GUIDELINES**

These general guidelines are issued to provide overall guidance as to emergency system restoration activities. These guidelines will be followed as much as practical in emergencies caused by hurricanes, tornadoes, ice storms and other natural disasters.

These guidelines are not intended to nor will they put in jeopardy the safety of any employee or their family. Dependent upon the intensity of the storm as determined by the company's management, employees will be required to report to work as instructed. If the intensity of the storm is such that weather conditions will be extremely severe, only a skeleton crew will be present at the work location. All others will report for duty as soon as conditions subside to a reasonable level. Those on vacation will be expected to report for duty.

The Northwest Florida office building was designed to withstand 100 mph sustained winds. Should winds be expected to significantly exceed these ratings, alternative locations will be identified and restoration activities will be relocated to an appropriate facility.

These guidelines are not intended to prevent responding to emergency situations. Any life threatening emergency will be handled immediately, in such a manner as to not endanger the lives of others.

Each employee and contractor should maintain good customer relations during restoration activities. Customer service will continue to be a high priority and every reasonable effort should be made to satisfy our customers.

Press releases and public announcements should be made only by designated company management personnel.

Restoration activities will be handled in the following manner:

- A. During the early stages of the emergency, restoration will be handled in the usual manner. All service will be restored as soon as possible.
- B. As the storm intensifies and trouble reaches major proportions, the main restoration activities will be limited to keeping main feeder energized by clearing trouble without making repairs.
- C. When the intensity of the storm is such that work can no longer be done safely, all work will cease and personnel will report to the office or other safe location.

- D. When the storm has subsided to a reasonable level and it is safe to begin restoration activities damage assessment and restoration of main feeders to critical customers will begin.
- E. Restoration activities will continue in an effort to restore service in the following manner:
  - 1) Substations
  - 2) Main feeders to critical customers
  - 3) Other main feeders
  - 4) Undamaged primary
  - 5) Damaged primary, secondary, service, street lights, security lights

## **5. EMERGENCY SAFETY PRECAUTIONS**

All Rules in the Safe Practices Manual Should be observed. However, in order to point out some particular precautions which should be observed during storms, the following instructions listed below should receive special emphasis:

### **A. SIZING UP WORK:**

Before undertaking any job, the job should be thoroughly discussed and all personnel should understand what is how it is to be done, and the following:

- 1) Voltage and position of all wires, or cables, and the sources or source of energy.
- 2) That the work in hand can be done safely.
- 3) That there is a sufficient amount of each kind of protective equipment on hand to thoroughly protect the work man.
- 4) They should consider the ground traffic conditions and arrange to protect and guard these against all hazards.

### **B. INSULATION:**

In cases of trouble following storms, all wires, regardless of normal voltage, are to be considered as being at primary voltage and are not to be handled except with protective equipment because of the danger of crosses between primary and secondary circuits.

### **C. DISTRIBUTION CIRCUITS ON OR NEAR TRANSMISSION POLES:**

If it is necessary to work on the conductors of a distribution circuit carried on or near transmission line poles with the transmission circuit energized and normal, any work on the conductors of the distribution circuits must be done between sets of grounds or else the distribution circuit must be worked and treated as an energized circuit. To determine positively that the lines to be worked are de-energized, test or investigation must be made before grounds are applied.

If the transmission line is also out of service and apparently in trouble, it must be considered as a possible source from which the distribution circuit may be energized, and it must be definitely determined that the transmission circuit as well as the distribution circuit is de-energized and grounded and the source or sources of supply are open and proper clearance obtained before the distribution circuit may be worked as de-energized.

### **D. STREET LIGHTING WIRES:**

Street lighting wires shall be considered energized at all times and the workman shall protect himself against them with proper protective equipment even when circuits are normally de-energized. Such a line is liable to become energized by accidental induction or lightning and sometimes street lighting wires become crossed with other energized wires.

**E. FUSE CUT-OUT CLEARANCE:**

When a distribution circuit is to be de-energized and cleared for working on conductors or other equipment by the opening of a fuse cut-out, either of the enclosed or open type, the fuse holder or tube is to be removed completely from the fuse assembly. The removed fuse holder or tube is to be placed at a safe and conspicuous location away from the fuse cut-out as an indication to other employees that the fuse cut-out shall continue in this open position until the work is completed. In addition, a red "hold" switch tag (with Lineman's name) should be attached to the pole in a conspicuous location and then removed when work is completed.

**F. REQUIREMENTS FOR USE OF RUBBER PROTECTIVE APPARATUS:**

In case of trouble following storms, all wires, regardless of normal voltage, are to be considered as being at primary voltage and are not to be handled except with protective equipment because of danger of crosses between primary and secondary circuits.

- 1) Energized Conductors - Rubber gloves must always be worn when working on energized lines or energized conductors or equipment up to 15,000 volts between conductors.
- 2) Working position - Rubber gloves must be put on before coming in reach of energized conductors when work is done on conductors or protective equipment is to be installed.

Because of the possibility of high voltage existing, rubber gloves must be worn until the conductor is grounded on primary circuits and on street lighting circuits.

Care of Rubber Protective Apparatus - At each job, before a workman puts on his rubber gloves, he should test each glove mechanically for cuts and weak spots by rolling it up tightly, beginning at the gauntlet. All of this type equipment, when not in use, must be stored in dry proper containers or compartment provided for this purpose.

**G. SWITCHING ORDERS:**

In all switching orders, the switches shall be referred to by their numbers and not by the name of the circuit which they control. The sequence in which the switch numbers are given, in the order, shall indicate the sequence of the switching operation. For example, an order given: "open switches 502-509 and close switches 511-502" shall be executed as follows: first, open switch 502; second, open switch 509; third, close switch 511; fourth, close switch 502.

**NO DEVIATION FROM THIS RULE WILL BE PERMITTED.**

To avoid misunderstandings and to prevent accidents, all orders concerning switching operations, or the handling of lines and equipment must be repeated to the person giving name, and identity of person giving order secured. Likewise, the operator giving an order must secure identity of person to whom it is given.

All switching orders must be written on a piece of paper by the person receiving same, and this written order must be carried by the person while doing the switching. *In no case shall anyone attempt to execute a switching order from memory.*

H. **HIGH WATER:**

During periods of high water involving lines or equipment, patrolmen shall not attempt to swim sections of the patrol which may be submerged. Necessary patrols over flooded areas must be done with boats and in such instances men engaged in these patrols shall wear suitable life belts or jackets.

I. **BROKEN CONDUCTORS:**

Before climbing pole, check for broken conductors which may be in contact with pole. Clear before climbing.

6. **ANNUAL PREPARATIONS**

**Senior Operations Manager**

- A. Review emergency procedure prior to May 1 and update as necessary.
- B. Review employee assignments with all personnel prior to June 1.
- C. Update status of emergency crew assistance (Contractors, NW Florida, SEE, Gulf Power, WFEC, etc.).
- D. Schedule and conduct half day emergency procedure training sessions prior to July 1.
- E. Ensure storm shutters, laundry facilities and cooking facilities are available.

**Senior Engineer**

- A. Check all communication equipment for proper operation. Check spare equipment and parts.
- B. Check material quantities and emergency stock prior to June 1. Begin necessary purchasing of emergency stock approved for purchase prior to an emergency.
- C. Update and have on hand the following:
  - 1) Storm safety precautions
  - 2) General operating instructions
  - 3) Distribution maps
  - 4) Single line switching maps
  - 5) City and county maps
- D. Have necessary emergency material delivered prior to June 1.

**Logistics**

- A. Update the list of critical customers by town/county. Group the critical customers by town/county by classification:

- 1) Hospitals and clinics
  - 2) Public utilities
  - 3) Municipal and state emergency service
  - 4) Communication and broadcasting services
  - 5) Major food storage/processing facilities
  - 6) Disaster shelter and motels
  - 7) Correctional facilities
  - 8) Airport
- B.** Update phone list for employees, law enforcement, emergency management, city/towns, utilities, contractors, tree trimming, personnel, news media, PSC, DCA, EDC, GEO, etc.
- C.** Review emergency telephone arrangements and make additional preliminary arrangements.
- D.** Update status of thirty (30) motel rooms necessary for emergency/contract crews.
- E.** Locate sources of food/water for crews and office personnel. Identify local and out of town caterers.
- F.** Update status of building security firm.
- G.** Locate sources for provision of the following Division office supplies.
- 1) Three day supply of food and water. (See section 22, Logistics for List of Supplies)
  - 2) Supply of air mattress/cots.
  - 3) Portable AM/FM radios with batteries.
  - 4) Laundry services/supplies.
  - 5) First aid supplies.
  - 6) Twenty (20) flashlights with batteries.

#### **Assistant Operations Manager**

- A.** Review safety precautions with all line crew personnel prior to June 1.
- B.** Have control room and all necessary information and equipment ready for prompt setup. Phone jacks, radio transmitter connection and distribution map are minimum requirements.
- C.** Conduct annual refresher training for personnel required to operate the Outage Management System.
- D.** Update status of emergency fuel suppliers, on site fuel and mobile fuel suppliers.
- E.** Update status of vehicle repair facilities.
- F.** Review status of all transportation equipment and have repairs made.

### **7. PREPARATION JUST PROIR TO THE EMERGENCY**

#### **Senior Operations Manager**

- A.** Monitor the emergency.
- B.** Begin making preparations for obtaining emergency assistance from other utilities and contractors.



- C. Check the status of personnel on vacation.
- D. Handle all media request.
- E. Inform all employees as to assignments and emergency information.
- F. Consult with FPUC President concerning activation of Division Emergency Procedures.
- G. Consult with Senior Staff concerning assistance from other divisions (i.e. mechanics, storeroom, media, family assistance, IT/Communications. Personnel from other divisions will be identified and mobilized. They will move as close as practical to Northwest Florida and then proceed to the office as soon after the emergency as travel can be accomplished safely. This location may change depending upon the situation.
- H. Obtain special job number for all emergency related work.

#### **Assistant Operations Manager**

- A. Have all vehicles stocked with all necessary emergency materials and fuel.
- B. Check emergency stock levels and fuel supplies.
- C. Review plan to supply power to office and warehouse facility.
- D. Check all communication equipment.
- E. Review safety precautions with all personnel.
- F. Review line department job assignments with personnel and pass out necessary forms, information.
- G. Have all hazardous conditions corrected and construction jobs stabilized.
- H. Verify emergency generator is fully fueled and operable with back-up fuel available.
- I. Make arrangements for a suitable boat and trailer.
- J. Ensure all vehicle repairs are made and final arrangements with vehicle repair facilities confirmed.
- K. Check on emergency generators and secure additional generators if needed.

#### **Logistics**

- A. Arrange for additional petty cash and cash advances (if necessary).
- B. Work with HR department and personnel from other divisions to provide assistance to employees and their families. Assistance may include work to prevent further damage to homes, care for children; work with contractors or insurance companies and provide food/lodging/clothing, etc.
- C. Make definite arrangements for contract crew lodging.
- D. Make definite arrangements for food/water/drinks for all personnel.
- E. Purchase food supply for office/warehouse prior to storm (if the severity of the storm warrants this).

- F. Make arrangements for an abundant supply of ice.
- G. Make definite arrangements for building security.
- H. Make definite arrangements for Division Office supplies (See Annual Preparations, Logistics Manager, and Item E.)

**Senior Engineer**

- A. Provide distribution maps, procedures, etc. as necessary.
- B. Begin constant monitoring customer outages.
- C. Monitor time/material needs of contractors.
- D. Assemble for safety briefing.

**8. DURING THE EMERGENCY**

**Senior Operations Manager**

- A. Be located at the Northwest Florida office and constantly monitor the situation and restoration process.
- B. Keep media sources informed.
- C. Begin activating additional services that will be needed during the restoration process.

**Senior Engineer**

- A. Be located at the Northwest Florida office and constantly monitor the situation and restoration process.
- B. Coordinate overall restoration process.
- C. Process customer outage system analysis to determine outage locations.
- D. Activate control room.

**Logistics**

- A. Be located at the Northwest Florida office
- B. Coordinate assistance to employees and their families.
- C. Have food and drinks available to all employees.
- D. Work with Senior Operations Manager and begin making final logistical arrangements for outside crews.

**Assist. Operations Manager**

- A. Be located at the Northwest Florida office
- B. Work with Senior Operations Manager and Senior Engineer to determine restoration requirements.

**9. AFTER THE EMERGENCY**

**Senior Operations Manager**

- A. Determine manpower requirement from information provided by others. Contact WPB concerning the situation, if possible, and advise whether or not the additional personnel should continue to Northwest Florida.
- B. Begin making request for additional manpower contractors.
- C. Keep the media informed until such time that the Manager of Communications is on site. At that time, the Manager of Communications will work with the General Manager to keep the Media informed.

**Senior Engineer**

- A. Initiate damage assessment teams.
- B. Prioritize and schedule the restoration process.
- C. Make assignments and dispatch crews as necessary in order to ensure orderly and efficient restoration.
- D. Provide damage assessment to Senior Operations Manager.
- E. Provide updates to Senior Operations Manager as needed concerning restoration progress.
- F. Monitor manpower and equipment requirements and update Senior Operations Manager as required.
- G. Keep a list of all company and outside crews and their locations.
- H. Monitor storeroom and remote storeroom for proper operation and inventory. Analyze manpower requirements.

**Logistics**

- A. Provide assistance and serve as liaison to employees and their families.
- B. Make final and definite arrangements for lodging, fuel, meals, snacks, coffee, drinks, etc. for all employees and contract employees.
- C. Check-in all outside crews and log the personnel and equipment included. Provide assistance with lodging, meals, etc. and keep up with crew locations.
- D. Provide assistance as needed.
- E. Ensure building security firm is operating at office.

- F. Ensure Division office supplies are in place if needed.
- G. Ensure caterers are available as needed.

**Asst. Operations Manager**

- A. Determine and assign appropriate manpower and equipment for each outage situation.
- B. Work with Senior Operations Manager and Senior Engineer to determine restoration requirements.
- C. Provide outside crews with all necessary information and SAFETY INFORMATION.
- D. Ensure all documents are completed prior to material leaving the storeroom and storeroom yard.
- E. Monitor and provide assistance in repairing vehicles.

**10. OPERATING PROCEDURE**

These instructions are intended to give the employee working on the line information as to the general procedure to be followed under hurricane conditions.

The Asst. Ops. Managers will review these instructions with their employees each year so that they may become familiar with the details. This should be done before July 1, each year.

A. Before the Storm

All operating personnel should be instructed as to:

- 1) Safety and operating procedures to be followed during the storm.
- 2) Where and when materials and supplies will be available.
- 3) Their assigned areas and supervisor.
- 4) Any provisions made for feeding and lodging.
- 5) Work days will normally be two shifts. Each shift will consist of at least 12 hours but could be 16 hours.
- 6) The necessity of dividing line crews for clearing and minor repairs.
- 7) Radio and telephone communication procedures with appropriate list of call letters and telephone numbers.

B. During the Storm

1) First Stage - Repairing All Cases Reported

In order to reduce the over-all outage time to customers who may be interrupted at the beginning of the storm, trouble will be handled in a normal manner during the early stages.

2) Second Stage - Clearing Trouble From the Lines

When the volume of trouble increases to the point where large areas are interrupted, the Line and Service Supervisors will instruct crews to clear trouble from the lines without making repairs in order to maintain service to essential customers and feeders.

- a. Secondary or service wires may be cleared by cutting the conductor away from energized lines or by opening the transformer cut-out.

- b. Damaged primary conductors may be cleared by cutting and rolling back a primary jumper or conductor at the crossarm or by sectionalizing switching if applicable.

3) Third Stage - De-energizing Main Lines

When the winds reach the point where it is no longer safe for crews to continue clearing operations all restoration activities will cease. The Line and Service Supervisors may instruct crews to de-energize main line feeders at substations if necessary to clear extremely hazardous conditions.

C. After the Storm

1) Sequence of Restoration

The sequence of restoration after the winds subside to a safe working level will be as follows:

- a. Substations
- b. Essential customers
- c. Feeders
- d. Undamaged primaries (fuse replacement only)
- e. Damaged primaries
- f. Secondaries
- g. Services
- h. Street lights

2) Line Patrols

All distribution lines which have "locked out" due to storm to prevent further damage must not be re-energized until patrolled and cleared of primary faults.

3) Discuss with Safety Coordinator on safety concerns/near miss during restorations.

## 11. TELEPHONE OPERATORS GUIDE

During any major interruption our customers will naturally be concerned about falling wires, burning wires, defrosting refrigeration and even their daily routines in which electricity plays a part. The most important test we have is maintaining good relations during these emergencies. Those employees answering telephones must keep this in mind - be calm, pleasant and sympathetic with the customer and at the same time getting the necessary information needed to clear dangerous conditions and restore service as soon as possible, giving as much information to the customer that is available.

Outlined below is a suggested procedure to be used during three different phases of an interruption (The General Manager or Engineering Manager will determine when Phase 1 begins and when movement to Phase 2 and 3 is indicated):

**Phase 1** - will be in effect until the time of the first trouble call until it is evident that there is widespread damage in the area.

**Phase 2** - will be in effect following Phase 1 until damage evaluations have been made and estimate of the time required to make major repairs.

**Phase 3** - will begin in an area where an estimate of the time required to make major repairs is available and will continue until all trouble is clear.

Your supervisor will advise you when conditions change from one phase to another in accordance with the routines outlined below:

Suggested Answering Routine to be used by All Operators

**Phase 1 - Early Trouble Prior to Extensive Damage**

1. "Florida Public Utilities, May we help you please."
  - a. If no lights, no power, lights dim, ask: "What is your name, address and telephone number please?"
  - b. If wire down, pole broken, tree on a line, ask:
    - 1) "Is the wire burning?"
    - 2) "Are your lights working?"
    - 3) "We hope to be able to make repairs shortly. Thank you very much for calling."

**Phase 2 - Extensive Damage Evident But Estimate of Repair Time Not Available**

1. "Florida Public Utilities, May we help you please."
  - a. If no lights, no power, lights dim, ask: "What is your name, address and telephone number please?"
  - b. If wire down, pole broken, tree on a line, ask:
    - 1) "Is the wire burning?"
    - 2) "Are your lights working?"
    - 3) "Our electric system has suffered considerable damage in your area and we haven't been able to make an estimate of the time required for repairs. Our crews are working now and if your service has not been restored by (morning/afternoon) please call again. Thank you."

**Phase 3 - Damage Evaluated and Repair Time Estimated**

1. "Florida Public Utilities, May we help you please."
  - a. If no lights, no power, lights dim, ask: "What is your name, address and telephone number please?"
  - b. If wire down, pole broken, tree on a line, ask:
    - 1) "Is the wire burning?"
    - 2) "Are your lights working?"
    - 3) "We have crews working on the lines which serve your area and repairs should be made by (time). If your electricity is not on by that time, please call again. Thank you."

Remember a properly handled telephone conversation with a customer can create an immeasurable amount of good will. When conversing with customers, keep the following points in mind:

1. Be courteous to each customer.
2. Give him as much information as is available of the restoration work.

3. Record each call and report the information vital to restoring the customer's service.
4. Handle each call as briefly as possible.
5. Thank the customer for calling.
6. Do not give the news media information. If a request for new information is received, record the name of the individual, news organization, telephone number and specific request. Inform the caller that a company representative will return the call. The information should be sent immediately to the General Manager, Northwest Florida.
7. During an emergency condition, some customers will contact the company for reasons that do not pertain to the emergency. These calls should be recorded and the exact customer needs should be stated in the remarks column. These calls may include disconnections, reconnections, etc., or may be a personal call to an employee. After the contact has been recorded, the completed form should be given directly to the supervisor.

#### Entering Outages

Each customer call will be recorded in the Outage Management System. The information entered should be entered accurately to ensure the system operates properly. The information entered will be stored as a permanent record and will be used to analyze the nature of the outages.

Should emergency situations come to your attention, please notify a supervisor. The method of this documentation will be determined.

## **12. MEDIA/PUBLIC INFORMATION GUIDE**

In order to monitor all information given to media and public sources, only the General Manager, Northwest Florida, Manager of Communications or their designee will make press releases. If other employees are asked by media or public agencies for information, politely ask them for contact information so the General Manager, Northwest Florida or Manager of Communications can provide them the latest information.

## **13. WAREHOUSE PROCEDURE**

During an emergency, material is vital to promptly and efficiently restore service to all customers. It is therefore important to monitor all stock levels to ensure adequate supplies are on-hand and if stock levels get low, be able to quickly order additional materials.

All material taken from the storeroom or remote storeroom will have the appropriate documentation completed before being removed from the stores area. The stores personnel will ensure this is followed.

Only authorized personnel should be in the stores area. Stores personnel will monitor those in the stores area to ensure compliance.

**14. PERSONNEL BACKUP CONTINGENCIES**

Should the following personnel not be available during the emergencies, personnel in the positions listed below will fill in as needed.

Senior Operations Manager  
Assistant Operations Manager  
Senior Engineer

Senior Engineer  
Assistant Operations Manager  
Senior Operations Manager

Logistics Manager  
Energy Conservation Representative



15. EMPLOYEE ASSIGNMENTS

## TENTATIVE SCHEDULE

<u>DAY SHIFT</u> 6:00 AM Reporting Time	<u>NIGHT SHIFT</u> 6:00 PM Reporting Time
<b><u>OFFICE</u></b>	<b><u>OFFICE</u></b>
Warren DiNapoli      Senior Operations Manager, NW	Donna Fowler              Stores Manager
Steve Toole            Senior Engineer	Morgann Lee              Telephone
Janine Roye            Logistics Lead	
Mason Brock          Logistics	Donnie Tew                Engineering /Cust. Outages
Sally Jones            Customer Care Supervisor	
Amber Cumbie        Telephone	<b><u>SERVICE CREWS</u></b>
Laura McCoy          Telephone	Darryl Grooms            Crew Leader
Chastity Gokey        Telephone	Stephen Amos            Apprentice Lineman
<b><u>SERVICE / LINE CREWS</u></b>	
Jerry Lewis            Assist. Ops	<b><u>PATROLMAN/GUIDE</u></b>
Bradley Flowers      Lineman	Janet Register            Patrol/Guide
James Ussery          Crew Leader	
Alvin Foran            Crew Leader	
Kevin Harris           Lineman	
Jeremy Hill            Lineman	
Andy Bevis            Lineman	
Eric Norris            Lineman	
Chris Allen            Lineman	
Bobby See            IMC Technician I	
John Griffin           IMC Technician I	
<b><u>STORES</u></b>	
Donna Fowler          Stores Supervisor	
Doug Jones            Warehouseman	
<b><u>PATROL/GUIDE/SAFETY</u></b>	
Rhondon Gray        SAFETY	
Virginia Nail          Patrol/Guide	
Kate Jones            Patrol/Guide	

**16. EMERGENCY ASSISTANCE LIST**

Company	Contact	Telephone	Available Resources
Gulf Power Company	Andy McQuagge	(850) 872-3220	Crews
West Florida Electric Coop	Bill Rimes	(850) 263-6518	Crews
FPU-Fernandina Beach	Bill Grant	(904) 277-1957	Crews
Davey Tree	Russell Brooks	(352) 279-8622	Tree Crews
DaveyTree	Russell Brooks	(228) 396-5810	Tree Crews
City of Tallahassee		(850) 599-5811	Crews
Talquin Electric Coop		(850) 627-7651	Crews
Gulf Coast Electric Coop		(850) 877-6166	Crews
Public Service Commission	Joseph Jenkins	(850) 488-8501	
Public Service Commission	Bob Trapp	(850) 488-8501	
Red Simpson Inc	John Simpson	(318) 487-1074	Crews
Florida Electric Power Coord Group	R J Midulla	(813) 289-5644	Crews
Mastec	Copper Nelson	(850) 519-0664	Crews
Utilicon	Gene Holley	(478) 348-3233	Crews
		(850) 890-0131 cell	
		(850) 638-7129 home	
Harper Electric	Mark Harper	(334) 222-7022	
		(334) 222-7854	
		(334) 343-1703 cell	
<b>Vehicle Repairs Assistance</b>			
Company	Contact	Telephone	Available Resources
Altec Industries Inc		(205) 458-3850	Mechanical Repairs
Altec Industries Inc		(205) 458-3857	Mechanical Repairs
Altec Industries Inc		(205) 458-3889	Mechanical Repairs
Altec Industries Inc		(205) 458-3849	Mechanical Repairs
Altec Industries Inc		(205) 458-3848	Mechanical Repairs
Auto Clinic	Office	(904) 482-6632	Mechanical Repairs
Auto Clinic	Mike Krieser	(850) 569-8475	Mechanical Repairs
Auto Clinic		258-6274	Mechanical Repairs
Dale Brannon	Dale Brannon	352-4613 shop	Wrecker
		(850) 573-0275 cell	Wrecker

**17. EMERGENCY STOCK REQUIREMENTS**

Bin #	Description	Quantity
31-1320	Wire, #4 ACSR Bare	25,000
31-1350	Wire, #1/0 ACSR Bare	6,000
31-1550	Wire, #4 AL Triplex	10,000

31-1590	Wire, #1/0 AL Triplex	10,000
31-1650	Wire, #2 AL Quad	1,000
31-1670	Wire, #1/0 AL Quad	1,000
31-1690	Wire, #4/0 AL Quad	1,000
31-1720	Wire, 3/8 Guy	3,000
35-1160	Arrester, MOV, Line	100
35-2370	Clevis Dead End	100
35-2710	Cut-out, Fused, 100A	48
35-2720	Cut-out, Load Break, 200 A	24
35-2860	Guy Grip, 3/8 Galv	100
35-2975	Insulator, Pin Type, 7500 V	100
35-3060	Insulator -Rack Type (Spool)	100
35-3110	Insulator Deadend Epox.	100
35-3115	Insulator, Fiberglass Rod 12"	25
35-3120	Insulator, Fiberglass Rod 5'	50
35-3370	Pole Top Pin	100
35-3470	Pin, Fiberglass Stand Off	100
35-3520	Pole, 30'6	30
35-3540	Pole, 35'5	10
35-3555	Pole, 40'1	30
35-3579	Pole, 45'1	25
35-3590	Pole, 50'1	10
35-3600	Pole, 55'1	5
35-3605	Pole, 60'1	5
35-4039	Ties, #4 Side	50
35-4060	Ties, #477 Side	50
35-4068	Ties, #4 Wrap lock	100
35-4100	Ties, #477 Wrap lock	50
37-1005	Clamp, Dead-end #6-#2 Service	200
37-1020	Clamp, Dead-end #1/0 Service	100
37-1390	Connector, H Type, WR-159	1,000
37-1400	Connector, H Type, WR-189	1,000
37-1405	Connector, H Type, WR-289	200
37-1410	Connector, H Type, WR-279	100
37-1420	Connector, H Type, WR-379	100
37-1430	Connector, H Type, WR-419	100
37-1440	Connector, H Type, WR-399	150
37-1456	Connector, H Type, WR-885	100
37-1460	Connector, H Type, WR-835	100
37-1620	Connector, Vise Action, #6 Cu	100
37-1630	Connector, Vise Action, #4 Cu	100
37-1650	Connector, Vise Action, #2 Cu	100
37-2192	Sleeves, Auto Splice, #4 AL	500
37-2200	Sleeves, Auto Splice, #1/0 AL	50
37-2208	Sleeves, Auto Splice, #3/0 AL	25
37-2210	Sleeves, Auto Splice, #4/0 AL	25
37-2218	Sleeves, Auto Splice, 336 AL	100
37-2225	Sleeves, Auto Splice, 477 AL	150
37-2550	Sleeves, Triplex Neutral, #4 AL	100
37-2560	Sleeves, Triplex Neutral, #2 AL	75
37-2610	Splice, Guy	50

37-2740	Stirrup, #4	100
39-1170	Fuse Link, 2 ½ Amp	150
39-1190	Fuse Link, 4 Amp	100
39-1220	Fuse Link, 7 Amp	50
39-1230	Fuse Link, 10 Amp	150
39-1240	Fuse Link, 15 Amp	100
39-1250	Fuse Link, 20 Amp	25
39-1260	Fuse Link, 25 Amp	25
39-1270	Fuse Link, 30 Amp	25
39-1280	Fuse Link, 40 Amp	25
39-1290	Fuse Link, 50 Amp	25
39-1300	Fuse Link, 65 Amp	25
91-1090	Transformer, 15 KVA	10
91-1100	Transformer, 25 KVA	20
91-1110	Transformer, 37.5 KVA	10
91-1120	Transformer, 50 KVA	10

## 18. TRANSPORTATION AND EQUIPMENT

TRUCK #	ITEM DESCRIPTION	X	Y	Z	GPS INSTALLED	VEHICLE OPERABLE	DATE	BY	CONTACT/ COMMENTS
810	Fork Lift								
859	Pole Trailer								
860	Material Trailer								
861	Combination Pole Trailer								
862	Wire Retrieving Trailer								
863	Wire Pulling Trailer								
969	Freightliner/Derrick								
979	Freightliner/Derrick								
968	Material Handler/Freightliner								
980	Bucket Truck								
982	Pick-Up Truck (Griffin)								
991	Rav4(Jones)								
990	Rav4 (Nail)								
957	Toyota Pre-Runner (Tew)								
954	Altec Material Handler								
974	Altec Material Handler								
956	Chevy Pickup (Flag)								
959	Toyota Tundra (Spare)								
985	Ford Pickup (Tanner)								
983	Altec Service Material Handler								
962	Ford Transit (See)								
965	Altec Material Handler								
986	Ford Pickup (Lewis)								
989	Toy. Pickup (Register)								
865	Signboard								
866	Trailer								
978	GMC Pickup (Toole)								
987	Ford Exp. (Shelley)								
984	Toyota Rav4 (Brock)								
992	Chevy Pickup (Gray)								

## 19. CRITICAL CUSTOMER LIST

### A. Hospitals, Clinics, Nursing Homes

<u>Name</u>	<u>Address</u>	<u>Telephone</u>	<u>Contact Person</u>
Jackson Hospital	800 Hospital Dr.	526-2200	Larry Meese
Marianna Convalescent Ctr.	805 5th Ave.	482-8091	Johnnie Cloud
The Nursing Pavilion	710 3rd Ave.	526-3191	Greg Mitchell

### B. Public Utilities

<u>Name</u>	<u>Address</u>	<u>Telephone</u>	<u>Contact Person</u>
Marianna Waste Water	2832 Davey St.	482-4353	Jim Dean
Sunland Waster Water T.P.	3693 Industrial Park	"	"
Park St. Pump Station	2988 Park St.	"	"
Davis Field Pump Station	4457 South St.	"	"
Sheffield Pump Station	3325 Old US Rd.	"	"
Marianna Well #5	Clinton & Noland St.	"	"
Marianna Well #6	Ninth Av. & Third St.	"	"
Marianna Well #1	Hwy 90 W/ Pool	"	"
Marianna Public Work	4168 South St.	"	"
Marianna Gas Department		"	"

### C. Major Disaster Shelters/Motels

<u>Name</u>	<u>Address</u>	<u>Telephone</u>	<u>Contact Person</u>
Best Western	2086 Hwy 71	526-5666	
Comfort Inn	2175 Hwy 71	526-5600	
Exective Inn	4113 Lafayette	526-3710	
Best-Value Inn	4168 Lafayette	482-4973	
Chipola Jr. College	3094 College Dr.	526-2761	
Cottondale High School	2680 Levy St	482-9821	Steve Benton
Malone High School	5361 North St	482-9950	Steve Benton
Marianna High School	Caverns RD.	482-9605	Steve Benton
Marianna Middle School	4144 South St.	482-9609	Steve Benton
Riverside Elementary	2958 Cherokee St.	482-9611	Steve Benton
Golson Elementary	4258 Second Av.	482-9607	Steve Benton
Microtel	4959 Whitetail Dr.	526-5005	Harkins
Hampton Inn	2185 Hwy 71	526-1006	D Thompson
Budget Inn	4135 Lafayette St	482-2700	R Shah
Fairfield Inn	4966 Whitetail Dr.	482-2578	
Ramada Limited	4655 E. Hwy 90	526-3251	
Comfort Inn	2214 Hwy 71	482-7112	
Marianna Inn	2222 Hwy 71	526-2900	

**D. Municipal and State Emergency Services**

<u>Name</u>	<u>Address</u>	<u>Telephone</u>	<u>Contact Person</u>
Florida Highway Patrol	3613 Hwy 90	482-9512	Lt. Moore
Jackson Co. Sheriff Dept.	4012 Lafayette St	482-9624	L. Roberts
Cottondale Police Dept.	2659 Front St.	352-4361	Watford
Marianna Police Dept.	2890 Green St.	526-3125	H. Bagett
Jackson Co. Fire & Rescue	Industrial Park Dr.	482-9669	R Brown
Alford Fire Dept.	1768 Georgia St	638-8657	B Yongue
Cottondale Fire Dept.	2669 Front St.	911	
Malone Fire Dept.	5187 Ninth Ave.	911	M Padget
Marianna Fire Dept.	4425 Clinton St.	482-2414	N. Lovett
Emergency Management	.	482-9683	Andreason
Emergency Management	.	573-1058	Andreason

**E. Communication and Broadcasting Services**

<u>Name</u>	<u>Address</u>	<u>Telephone</u>	<u>Contact Person</u>
WTOT/WJAQ Radio	4376 Lafayette St	482-3046	D Moore
Jackson County Floridan	4403 Constitution Ln	526-3614	V. Roberts
WMBB	Panama City	850-769-2313	M. McAfee

**F. Major Food Storage/Processing Facilities**

<u>Name</u>	<u>Address</u>	<u>Telephone</u>	<u>Contact Person</u>
Malone IGA	5417 10th St.	569-2635	
Grocery Outlet	Lafayette St.	526-5528	D. Pendergrass
Sunshine Food-Greenwood	S. Main	594-1286	
Winn Dixie	4478 Lafayette St	482-5303	Russ
Daffin Food Service	2867 Estes	482-4026	J. Milton
Walmart Superstore	Highway 71	526-5744	M. Gilmore
Save-a-lot	4700 Hwy 90	526-4700	

**G. Correction Facilities**

<u>Name</u>	<u>Address</u>	<u>Telephone</u>	<u>Contact Person</u>
Marianna Work Camp		482-9561	
Federal Correctional (FCI)	3625 FCI Rd	526-2313	L. Gross

**I. Airports**

<u>Name</u>	<u>Address</u>	<u>Telephone</u>	<u>Contact Person</u>
Chipola Aviation Inc.	3633 Industrial Park Dr	482-8480	
Panhandle Aviation	Greenwood	594-3224	
Marianna Airport/ Ind. Park	Industrial Park Dr.	482-2281	

**\*EMERGENCY FUEL**

**24HRS. DONALD CUTCHINS**  
**(H) 352-2906 ©573-1505**

**STORM/FUEL SHORTAGE**  
**(w) 482-7003 © 643-8925**

## 20. EMERGENCY TELEPHONE LISTING

- A. Telephone Repair  
Century Link (Wilton Crawford) 526-3481 or (611)
- B. Radio Repair  
Verizon (Jerry Fox) (850) 867-9633
- C. Gulf Power Company  
Pensacola Dispatcher 444-6517  
Panama City Dispatcher 872-3261  
Storm Coordinator 785-8305  
Mike Menk (Southern Company) (205)257-2599 / (205)515-2066 mobile  
Andy McQuagge 872-3220
- D. Emergency Management  
  
Jackson County (Rodney Andreason) 482-9633  
" " " 536-4500  
Calhoun County (Don O'Bryan) 674-8075/5161  
Liberty County (Jerry Butler) 643-3477  
State Office (Eric Torbett) 413-9911
- E. Law Enforcement - 911  
  
Jackson County 482-9624 / 482-9648  
Calhoun County 674-5049/4275  
Liberty County 643-2235  
Marianna 526-3125  
Greenwood 482-9648  
Malone 482-9648  
Cottondale 352-4361  
Alford 482-9648  
Altha 762-3900  
Bristol 643-2235  
Blountstown 674-5987  
Bascom 482-9648  
Florida Highway Patrol 482-9512
- F. Ambulance - 911  
  
Jackson County 482-9669 / 482-9668  
Calhoun County 674-5411  
Liberty County 643-2235
- G. News Media  
  
WTOT/WJAQ (Don Moore) 482-3046  
Jackson County Floridan 526-3614  
WTVY-Channel 4 TV/Dothan (334)792-3195  
WJHG-Channel 7 TV/Panama City 234-2125 / 526-5727  
WMBB-Channel 13 TV/Panama City 763-6000 / 482-8007



H. City/County Officials

Jackson County	482-9633
Calhoun County	674-4545
Liberty County	643-5404
Alford	579-4684
Bascom	569-2234
Cottondale	352-4361
Greenwood	594-1216
Malone	569-2308
Marianna	482-4353
Altha	762-3280
Bristol	643-2261
Blountstown	674-5488

I. Public Service Commission

Tim Devlin, Dir. Economic Regulation	413-6900
Dan Hoppe, Dir, Auditing and Safety	413-6480
Joseph Jenkins	413-6626
Bob Trapp	413-6632
Roland Floyd	413-6676
Connie Kummer	413-6701

**21. LOGISTICS**

**Motels:**

Best Western	526-5666
Comfort Inn	526-5600
Microtel	526-5005
Executive Inn	526-3710
Hampton Inn	526-1006
Holiday Inn Express	526-2900
Ramada Limited	526-3251
Best Value Inn	482-4973

**Air Mattress/Cots:**

Loftin's Rental Center	526-4680
North Florida Rentals	526-7368

**Laundry & Linen Services/Supplies:**

UniMac Express Laundry	482-6504
Nifty Cleaners	482-2825

**First Aid Supplies:**

Waco Drugs	482-5781	Kelson Drugs	526-2839
Paramore's	482-3924	Watson's	482-4035
CVS			

**Restaurants:**

Captain D's	482-6230
Beef O Bradys	482-0002
Fortune Cookie	526-3735
Jim's Buffet & Grill	526-2366
Madison's Warehouse	526-4000
Dairy Queen	482-1055
Sonny's Barbecue	526-7274
Ruby Tuesday	526-7100
Waffle Iron	526-5055
Zaxby's	633-4545
The Oaks	526-1114
Hungry Howies	526-7878
Ruby Tuesday	526-7100
Waffle Iron	526-5055
Zaxby's	633-4545

Firehouse Subs	482-5883
San Marcos	482-0062
Pizza Hut	482-5900
Gazebo Rest.	526-1276
Hungry Howies	526-7878

**Catering:**

Sweet Stuff Bakery	526-2250
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**Food Stores:**

Daffin Food Service	482-4026
Grocery Outlet	526-5528
Walmart Superstore	526-5744
Malone IGA	569-2635
Winn Dixie	482-5303

**Cellular Phones:**

Verizon	526-7701
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**Water Supply:**

FPU (Co. generator to supply water)  
Nantze Springs Water Co. 800-239-7873

**Ice Supply:**

Winn Dixie	482-5303
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**Service Stations:**

Big Little Store	526-5743
Cottondale Texaco	352-2804
Marianna Texaco	482-6105
Hartsfield Mini-Mart	482-4545
K & M Expressway	526-5575
McCoy's Chevron	526-2921
Marianna Chevron	526-2183
Marianna Truck Stop	526-3303
Mike's Texaco, Malone	569-2401
Nugget Oil	482-8585
Sangaree BP	482-5241
Murphy USA	482-6149
Stoney's	482-2028
Tom Thumb	482-4842

**Vehicle Repair Facilities:**

Baker Equipment	800-765-4908
Altec Industries Inc	205-323-8751
Thompson Tractor Co	526-2241
Beall Tire Co	482-323
Auto Clinic	482-6632

**Flashlights (20 w/batteries):**

Quantity on hand  
Mayer Electric (Additional) 800-216-6712

**Portable AM/FM Radios w/batteries:**

WalMart	526-5744
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**Necessary Supplies for Northwest Florida Office:****Food Items:**

<u>Item</u>	<u>Quantity</u>	<u>Item</u>	<u>Quantity</u>
Bread	15 loafs	Peanut Butter	5 jars
Gallon Size Water	50 Gallons	Bottle Size Water	100 bottles
Jelly (Grape & Strawberry)	5 jars	Milk	5 gallons
Orange Juice	3 gallons	Soft drinks (Miscellaneous)	20 two liter bottles
Soft drinks (miscellaneous)	10 cases	Margarine	6 each
Cookies (miscellaneous)	10 packs	Crackers	10 boxes
American Cheese	3 packs	Cheddar Cheese	5 blocks
Lunch Meat (miscellaneous)	10 pounds	Potato Chips (miscellaneous)	6 bags
Pretzels	4 bags	Tomatoes	1 bag
Onions	1 bag	Mayonnaise	4 each
Mustard	3 each	Ketchup	3 each
Pastries (miscellaneous)	5 boxes	Bagels	2 packs

**Supplies:**

<u>Item</u>	<u>Quantity</u>	<u>Item</u>	<u>Quantity</u>
Paper Plates	10 packs	Paper Bowls	5 packs
Plastic Utensils	5 packs	Aluminum Foil	10 boxes
Garbage Bags	5 boxes	Foil Pans/Trays	15 each
Paper Towels	20 rolls	Dish Towels and Rags	10 each
Serving Utensils	10 each	Dish Soap	3 each

## **22. SERVICE PLAN TO SUPPLY FPU OFFICE POWER**

During an emergency it is imperative that power be restored to the office/complex located at 2825 Pennsylvania Av. as soon as possible. Also of the utmost importance is to ensure the feeder to the building is maintained in optimum working order at all times. This includes tree trimming, replacing deteriorated poles, replacing defective equipment, etc.

After an emergency in which power is lost to the office/warehouse, someone will immediately go to the Marianna Substation in order to determine the status of the breaker #9854 (South St Feeder). That feeder will also be patrolled to determine what will be needed to restore service to the office/warehouse. All available personnel will be utilized to restore power.

If required, downstream switches should be opened so that power may be restored to the warehouse as soon as possible.

## **23. DAMAGE ASSESSMENT PLAN**

After a major storm or emergency occurs it will be necessary to access the damage to the system as quickly and accurately as possible. The following shows the assignments for a quick visual system inspection which is to be performed as soon after the storm/emergency as possible.

### **Senior Operations Manager**

Check Hospital feeder from the hospital to Marianna Substation. Check Marianna Substation.

### **Safety Coordinator**

Check Chipola Substation. Check along Old US Rd to Hwy 90.

### **Asst. Operations Manager**

Check along Kelson Av to Penn Av then down Penn Av to the office. Check Caverns Rd Substation. Check along Hwy 71 South to Hwy 90 then south on West Caledonia to South St then west on South St to Penn Av then north on Penn Av. to the warehouse.

### **Senior Engineer**

Check along Hwy 90 from Marianna Substation to Penn Ave.

## **24. DAMAGE ASSESSMENT FORM**

The Damage Assessment Form to be completed and returned as soon as possible after the storm/emergency. To ensure proper planning it is essential that this form be completed neatly, accurately and completely.