



February 28, 2018

**E-PORTAL FILING**

Ms. Carlotta Stauffer, Clerk  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

**Re: 20180000-OT – Undocketed Filings for 2018.**

Dear Ms. Stauffer:

Attached for filing on behalf of Florida Public Utilities Company, please find the Company's 2018 Distribution Reliability Report for the prior period 2017, including the Annual Wood Pole Inspection Report, and updates of FPUC's Storm Hardening Plan and Ten Storm Preparedness Initiatives.

As always, please don't hesitate to let me know if you have any questions. Thank you for your assistance with this filing.

Kind regards,

Beth Keating  
Gunster, Yoakley & Stewart, P.A.  
215 South Monroe St., Suite 601  
Tallahassee, FL 32301  
(850) 521-1706

cc:/ Tom Ballinger  
Penelope Buys



P.O. Box 418  
Fernandina Beach  
FL 32035-0418  
Phone: 904/261-3663  
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[www.fpuc.com](http://www.fpuc.com)

February 28, 2018

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 2017 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) 530-7052 or e-mail [mcassel@chpk.com](mailto:mcassel@chpk.com).

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Cassel". The signature is fluid and cursive.

Michael Cassel  
Director, Business Management & Analysis  
Florida Public Utilities Company

Attachment

Cc:

Commission Clerk  
Householder, Jeff  
Martin Cheryl  
Webber, Kevin  
Buddy Shelley

Puentes, Jorge  
Toole, Steve  
Mark Cutshaw

# Florida Public Utilities Company

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

2017 Annual Update

March 1, 2018



# **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, and 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>2017</b>
Cause (a)	Number of Outage Events(N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)
Named Storm	192	1,336.77	1,966.12
Defective Equipment	94	123.26	98.24
Vegetation	40	89.14	54.58
Animal	36	62.22	152.40
Lightning	34	88.38	90.04
Unknown	33	112.78	91.31
Planned Outage	16	45.29	174.94
Other	13	120.17	55.40
Vehicle	9	69.55	64.32
Transmission	8	49.88	45.07
Other Weather	3	66.51	53.26
Substation	1	13.00	13.00
<b>System Totals NE</b>	<b>479</b>	<b>593.53</b>	<b>499.41</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- NE Division</b>			Year: <b>2017</b>
Cause (a)	Number of Outage Events(N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)
Defective Equipment	94	123.26	98.24
Vegetation	40	89.14	54.58
Animal	36	62.22	152.40
Lightning	34	88.38	90.04
Unknown	33	112.78	91.31
Other	13	120.17	55.40
Vehicle	9	69.55	64.32
Other Weather	3	66.51	53.26
<b>System Totals NE</b>	<b>262</b>	<b>101.17</b>	<b>89.29</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>2017</b>
Cause (a)	Number of Outage Events(N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)
Vegetation	314	82.51	67.73
Animal	231	54.81	50.30
Named Storm	206	495.92	346.51
Other Weather	149	169.76	119.96
EOC Event	97	452.08	228.79
Defective Equipment	66	107.88	127.50
Planned Outage	52	68.14	61.39
Lightning	43	75.21	68.99
Other	31	71.99	12.75
Unknown	29	62.32	56.43
Vehicle	21	104.57	102.39
Substation	3	154.92	179.46
<b>System Totals NW</b>	<b>1242</b>	<b>185.56</b>	<b>156.42</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>2017</b>
Cause (a)	Number of Outage Events(N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)
Vegetation	314	82.51	67.73
Animal	231	54.81	50.30
Other Weather	149	169.76	119.96
Defective Equipment	66	107.88	127.50
Lightning	43	75.21	68.99
Other	31	71.99	12.75
Unknown	29	62.32	56.43
Vehicle	21	104.57	102.39
<b>System Totals: NW</b>	<b>884</b>	<b>91.01</b>	<b>81.87</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- FPUC Total</b>			Year: <b>2017</b>
Cause (a)	Number of Outage Events(N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)
Named Storm	398	901.55	1,482.79
Vegetation	354	83.26	65.09
Animal	267	55.81	115.52
Defective Equipment	160	116.91	104.14
Other Weather	152	167.72	119.62
EOC Event	97	452.08	228.79
Lightning	77	81.03	85.85
Planned Outage	68	62.76	66.66
Unknown	62	89.18	75.31
Other	44	86.22	34.77
Vehicle	30	94.07	101.33
Transmission	8	49.88	45.07
Substation	4	119.44	31.15
<b>System Totals FPUC</b>	<b>1721</b>	<b>299.11</b>	<b>374.56</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>2017</b>
Cause (a)	Number of Outage Events(N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)
Vegetation	354	83.26	65.09
Animal	267	55.81	115.52
Defective Equipment	160	116.91	104.14
Other Weather	152	167.72	119.62
Lightning	77	81.03	85.85
Unknown	62	89.18	75.31
Other	44	86.22	34.77
Vehicle	30	94.07	101.33
<b>System Totals FPUC</b>	<b>1146</b>	<b>93.33</b>	<b>84.50</b>

PSC/ECR 102-1(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>2017</b>	
District or Service Area (a)	SAIDI (b)	CAIDI (c)	SAIFI (d)	MAIFle (e)	CEMI5 (f)
NE Division	2914.36	499.41	5.84	N/A*	N/A*
NW Division	665.29	156.42	4.26	N/A*	N/A*
<b>System Averages</b>	<b>1,926.72</b>	<b>374.56</b>	<b>5.14</b>	<b>N/A*</b>	<b>N/A*</b>

\* 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**

<b>SYSTEM RELIABILITY INDICES – ADJUSTED</b>					
<b>Utility Name: <u>Florida Public Utilities Company</u></b>				<b>Year: <u>2017</u></b>	
<b>District or Service Area (a)</b>	<b>SAIDI (b)</b>	<b>CAIDI (c)</b>	<b>SAIFI (d)</b>	<b>MAIFle (e)</b>	<b>CEMI5 (f)</b>
NE Division	92.88	89.29	1.04	N/A*	N/A*
NW Division	197.41	81.87	2.41	N/A*	N/A*
<b>System Averages</b>	<b>138.81</b>	<b>84.50</b>	<b>1.64</b>	<b>N/A*</b>	<b>N/A*</b>

\* 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

## 2017 - 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
SOUTH FLETCHER (102)	70	539.63	1,670.75	5,844,283	3,498	37,774		
PLANTATION ROADSIDE (110)	11	434.53	2,760.37	4,941,054	1,790	4,780		
PLANTATION FIELDSIDE (111)	24	249.69	3,440.29	5,325,572	1,548	5,993		
FIFTEENTH STREET (209)	27	934.38	644.28	1,628,085	2,527	25,228		
NECTARINE (210)	23	530.00	372.35	573,416	1,540	12,190		
JASMINE STREET (211)	102	613.58	528.65	5,199,262	9,835	62,586		
11 <sup>TH</sup> STREET (212)	37	503.66	1,000.25	2,085,530	2,085	18,635		
CLINCH DRIVE (214)	34	341.86	785.89	1,512,055	1,924	11,623		
BONNIEVIEW (310)	40	1,137.14	869.24	2,613,818	3,007	45,485		
BAILEY (311)	87	510.61	1,001.38	10,043,803	10,030	44,423		
SADLER, SO.14TH (215)	9	423.74	1,395.95	2,648,111	1,897	3,814		
AMELIA ISLAND PARKWAY (312)	4	1,255.27	1,188.54	1,484,492	1,249	5,021		
AIP (315)	3	74.16	74.01	1,233,915	16,673	222		
PARKWAY SOUTH (104)	3	2,156.38	2,085.93	1,887,771	905	6,469		
STEPDOWN (306309)	2	11.03	11.03	88,157	7,989	22		
JL TERRY (313)	2	11.64	11.64	145,837	12,530	23		
STEPDOWN (22)	1	13.00	13.00	208,143	16,011	13		
<b>Totals</b>	<b>479</b>	<b>593.53</b>	<b>499.41</b>	<b>47,463,304</b>	<b>95,038</b>	<b>284,303</b>	<b>2,914.36</b>	<b>5.84</b>

**Total No. of Customers at end of 2017=>**

**16,286**

## 2017 - 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
SOUTH FLETCHER (102)	37	159.08	140.92	107,944	766	5,886		
PLANTATION ROADSIDE (110)	8	123.37	118.85	42,904	361	987		
PLANTATION FIELDSIDE (111)	17	79.01	78.30	9,083	116	1,343		
FIFTEENTH STREET (209)	17	102.46	131.83	157,141	1,192	1,742		
NECTARINE (210)	12	97.54	143.26	115,323	805	1,170		
JASMINE STREET (211)	62	98.65	92.79	681,451	7,344	6,116		
11 <sup>TH</sup> STREET (212)	22	93.95	106.57	28,134	264	2,067		
CLINCH DRIVE (214)	20	62.44	57.04	18,423	323	1,249		
BONNIEVIEW (310)	19	83.02	95.18	142,481	1,497	1,577		
BAILEY (311)	41	96.65	49.24	158,500	3,219	3,963		
SADLER, SO.14TH (215)	4	66.25	63.69	6,369	100	265		
AMELIA ISLAND PARKWAY (312)	3	46.98	47.01	44,848	954	141		
<b>Totals</b>	<b>262</b>	<b>101.17</b>	<b>89.29</b>	<b>1,512,602</b>	<b>16,941</b>	<b>26,506</b>	<b>92.88</b>	<b>1.04</b>

Total No. of Customers at end of 2017 ==>

16,286

## 2017 - 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
ALPHA (9952)	65	205.83	172.45	656,167	3,805	13,379		
BLOUNTSTOWN (9972)	12	114.23	168.31	94,254	560	1,371		
BRISTOL (9882)	73	76.07	137.82	319,323	2,317	5,553		
COLLEGE (9982)	157	233.56	129.39	483,027	3,733	36,668		
COTTONDALE (9866)	157	199.62	88.53	532,321	6,013	31,341		
DOGWOOD HEIGHTS (9722)	41	108.63	46.00	40,943	890	4,454		
FAMILY DOLLAR (9782)	3	288.72	255.09	2,296	9	866		
GREENWOOD (9742)	104	140.46	122.60	590,458	4,816	14,607		
HOSPITAL (9872)	63	247.15	101.05	222,824	2,205	15,570		
HWY 90E (9942)	130	196.19	150.46	283,912	1,887	25,504		
HWY 90W (9992)	50	288.62	207.60	183,932	886	14,431		
INDIAN SPRINGS (9932)	134	152.94	103.17	453,453	4,395	20,494		
INDUSTRIAL PARK (9752)	2	119.70	119.70	11,252	94	239		
PRISON (9732)	5	55.03	57.94	521	9	275		
RAILROAD (9512)	33	144.88	113.07	201,262	1,780	4,781		
SOUTH STREET (9854)	210	188.19	141.89	2,487,682	17,532	39,519		
Caverns Rd Sub	1	1,030.73	1,030.73	1,596,606	1,549	1,031		
Alpha Sub	1	295.97	295.97	257,195	869	296		
Blountstown Sub	1	86.78	86.78	90,515	1,043	87		
<b>Totals</b>	<b>1,242</b>	<b>185.56</b>	<b>156.42</b>	<b>8,507,943</b>	<b>54,392</b>	<b>230,469</b>	<b>666.56</b>	<b>4.26</b>

**Total No. of Customers at end of 2017**====>

**12,764**

## 2017 - 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
ALTHA (9952)	44	103.29	178.03	573,063	3,219	4,545		
BLOUNTSTOWN (9972)	9	75.22	97.16	29,828	307	677		
BRISTOL (9882)	55	57.74	45.31	29,814	658	3,176		
COLLEGE (9982)	104	106.54	76.17	151,123	1,984	11,080		
COTTONDALE (9866)	119	82.70	79.24	182,173	2,299	9,841		
DOGWOOD HEIGHTS (9722)	32	77.49	69.30	32,430	468	2,480		
FAMILY DOLLAR (9782)	3	288.72	255.09	2,296	9	866		
GREENWOOD (9742)	84	94.59	58.30	180,743	3,100	7,945		
HOSPITAL (9872)	47	103.75	69.03	135,774	1,967	4,876		
HWY 90E (9942)	93	113.67	101.93	146,785	1,440	10,571		
HWY 90W (9992)	32	73.69	68.61	46,242	674	2,358		
INDIAN SPRINGS (9932)	98	91.36	90.78	363,382	4,003	8,953		
PRISON (9732)	3	61.49	63.98	256	4	184		
RAILROAD (9512)	23	87.13	104.17	100,005	960	2,004		
SOUTH STREET (9854)	138	78.94	56.35	545,854	9,687	10,894		
<b>Totals</b>	<b>884</b>	<b>91.01</b>	<b>81.87</b>	<b>2,519,768</b>	<b>30,779</b>	<b>80,450</b>	<b>197.41</b>	<b>2.41</b>

Total No. of Customers at end of 2017==>

12,764

## **FPUC 2017 – Reliability Indicators and Analysis**

FPUC's reliability improved significantly in 2017. Both NE and NW Divisions continue to invest in its storm hardening initiatives, infrastructure improvements and system upgrades which will continue to generate reliability improvements in the future. The majority of FPUC's combined (NE & NW Divisions) reliability indicators improved substantially when compared to 2016. SAIDI improved 25.05% from 185.21 in 2016 to 138.81 in 2017. SAIFI improved 15.90% from 1.95 in 2016 to 1.64 in 2017. CAIDI improved 11.08% from 95.03 in 2016 to 84.50 in 2017. The only indicator which did not show an improvement was L-BAR which increased by 15.48% from 80.82 in 2016 to 93.33 in 2017. However, it was a 10.75% improvement from the 5 year peak in 2014 of 104.57.

As FPU reviews its five year reliability indicator trends, averages and outage causes, it notes that indicators continue to be significantly influenced by the weather. This is due to FPU's relatively small territory size when compared to other large investor owned utilities within the state. A good example of this was in September of 2017 when the NE Division had to evacuate its entire territory due to hurricane Irma. This is the main reason why there are a high number of excludable events in the tables below.

FPUC will continue to monitor all reliability indices and outage causes to adjust and improve current reliability programs. In 2018, FPU is planning to implement a new lateral protection strategy by installing cutout-mounted recloser units to continue to improve reliability.

## **FPUC 2017 – 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 2017. However, both the NE and NW was significantly impacted by Hurricane Irma and the NW was somewhat impacted by both Tropical Storm Cindy and Hurricane Harvey.

### **Transmission and Substation**

In 2017 the NE Division experienced a major 69KV transmission outage on January 21 due to a 69KV shield wire failure. This outage also affected the Bailey Rd Feeder #311 underbuilt distribution feeder as noted in the excluded events table below.

The NE Division was also affected by two major transmission outages on May 31 and July 10 of 2017. During these two events, all FPU's Northeast customers lost power when FPU's energy supplier (JEA) experienced severe weather conditions that tripped their 138KV incoming transmission lines to the Amelia Island.

The NE Division experienced a brief major substation outage on December 12, 2017 which affected the entire Amelia Island. The outage was due to a contractor who inadvertently tripped a 138 KV circuit breaker while he was installing a new protection and control equipment.

The NW Division experienced one substation outage that affected two substations. On 9/15/2017, Gulf Power Company had a lightning arrester fail. At the same time the motor operator also failed to clear the fault. Therefore, the upstream device cleared the fault, and Gulf Power personnel responded to the Altha Sub to manually operate the switch.

The NE and NW Divisions also had several planned outages to perform maintenance to different sections of the distribution system. Details about the above outage durations and affected customers are noted below in the Excluded Event Tables. In all cases, FPUC promptly dispatched crews to restore power to customers.

2017 NE Division Excluded Events					
Date	Feeder	Exclusion	Alt Cust	L	QVI
1/21/2017	AIP (315)	Transmission	5,534	141	777,527
1/21/2017	BAILEY (311)	Transmission	2,421	131	317,595
3/31/2017	SADLER NECTARINE SO.14TH (215)	Planned Outage	1	24	24
4/10/2017	BONNIEVIEW (310)	Planned Outage	1	51	51
4/26/2017	SOUTH FLETCHER (102)	Planned Outage	1	41	41
4/26/2017	BAILEY (311)	Planned Outage	1	71	71
5/18/2017	210 (210)	Planned Outage	85	245	20,811
5/31/2017	STEPDOWN (306309)	Transmission	3,993	7	27,951
5/31/2017	JL TERRY (313)	Transmission	6,269	8	47,226
5/31/2017	AIP (315)	Transmission	5,567	66	367,608
6/8/2017	PLANTATION FIELDSIDE (111)	Planned Outage	13	29	372
7/10/2017	STEPDOWN (306309)	Transmission	3,996	15	60,206
7/10/2017	AIP (315)	Transmission	5,572	16	88,781
7/10/2017	JL TERRY (313)	Transmission	6,261	16	98,611
7/11/2017	210 (210)	Planned Outage	3	100	300
7/13/2017	BAILEY (311)	Planned Outage			

			2	100	201
9/10/2017	JASMINE STREET (211)	Named Storm	1	190	190
9/10/2017	SOUTH FLETCHER (102)	Named Storm	2	73	147
9/10/2017	CLINCH DRIVE (214)	Named Storm	1	100	100
9/10/2017	SADLER NECTARINE SO.14TH (215)	Named Storm	60	67	4,047
9/10/2017	BAILEY (311)	Named Storm	1	23	23
9/10/2017	BAILEY (311)	Named Storm	2,508	3,023	7,580,430
9/10/2017	BAILEY (311)	Named Storm	12	1,448	17,376
9/10/2017	BAILEY (311)	Named Storm	3	1,387	4,161
9/10/2017	BONNIEVIEW (310)	Named Storm	1,230	1,318	1,620,792
9/10/2017	PLANTATION FIELDSIDE (111)	Named Storm	1,318	4,025	5,305,038
9/10/2017	FIFTEENTH STREET (209)	Named Storm	1,156	1,091	1,260,926
9/10/2017	212 (212)	Named Storm	944	1,090	1,028,960
9/11/2017	JASMINE STREET (211)	Named Storm	1,843	2,091	3,853,222
9/11/2017	FIFTEENTH STREET (209)	Named Storm	147	1,179	173,240
9/11/2017	SADLER NECTARINE SO.14TH (215)	Named Storm	1,044	829	864,989
9/11/2017	CLINCH DRIVE (214)	Named Storm	547	771	421,710
9/11/2017	SOUTH FLETCHER (102)	Named Storm	1,962	2,334	4,579,406
9/11/2017	PARKWAY SOUTH (104)	Named Storm	903	2,086	1,883,387
9/11/2017	PLANTATION ROADSIDE (110)	Named Storm	1,416	3,458	4,897,118
9/11/2017	312 (312)	Named Storm	295	4,880	1,439,644
9/11/2017	210 (210)	Named Storm	627	681	426,705
9/11/2017	CLINCH DRIVE (214)	Named Storm	36	64	2,314
9/11/2017	CLINCH DRIVE (214)	Named Storm	243	2,835	688,950
9/11/2017	CLINCH DRIVE (214)	Named Storm	159	1,787	284,154



9/11/2017	SADLER NECTARINE SO.14TH (215)	Named Storm	687	2,580	1,772,437
9/11/2017	FIFTEENTH STREET (209)	Named Storm	1	4,122	4,122
9/11/2017	FIFTEENTH STREET (209)	Named Storm	4	4,265	17,059
9/11/2017	FIFTEENTH STREET (209)	Named Storm	1	4,976	4,976
9/11/2017	210 (210)	Named Storm	1	3,421	3,421
9/11/2017	BONNIEVIEW (310)	Named Storm	88	2,468	217,175
9/11/2017	BONNIEVIEW (310)	Named Storm	36	2,503	90,102
9/11/2017	BONNIEVIEW (310)	Named Storm	6	4,349	26,094
9/11/2017	BONNIEVIEW (310)	Named Storm	51	4,381	223,452
9/11/2017	BONNIEVIEW (310)	Named Storm	5	4,866	24,328
9/11/2017	BONNIEVIEW (310)	Named Storm	11	3,767	41,442
9/11/2017	BONNIEVIEW (310)	Named Storm	4	4,369	17,475
9/11/2017	BONNIEVIEW (310)	Named Storm	43	3,683	158,348
9/11/2017	BONNIEVIEW (310)	Named Storm	10	4,370	43,699
9/11/2017	BONNIEVIEW (310)	Named Storm	1	463	463
9/11/2017	212 (212)	Named Storm	591	1,061	626,805
9/11/2017	FIFTEENTH STREET (209)	Named Storm	1	3,343	3,343
9/11/2017	210 (210)	Named Storm	1	3,324	3,324
9/11/2017	FIFTEENTH STREET (209)	Named Storm	1	3,225	3,225
9/12/2017	BONNIEVIEW (310)	Named Storm	1	2,922	2,922
9/12/2017	210 (210)	Named Storm	1	2,549	2,549
9/12/2017	JASMINE STREET (211)	Named Storm	56	1,885	105,568
9/12/2017	JASMINE STREET (211)	Named Storm	261	516	134,789
9/12/2017	JASMINE STREET (211)	Named Storm	17	1,880	31,967
9/12/2017	JASMINE STREET (211)	Named Storm			

			27	1,995	53,854
9/12/2017	JASMINE STREET (211)	Named Storm	8	1,979	15,829
9/12/2017	JASMINE STREET (211)	Named Storm	5	3,328	16,639
9/12/2017	JASMINE STREET (211)	Named Storm	3	3,184	9,553
9/12/2017	JASMINE STREET (211)	Named Storm	148	492	72,828
9/12/2017	JASMINE STREET (211)	Named Storm	3	4,213	12,638
9/12/2017	JASMINE STREET (211)	Named Storm	6	3,423	20,535
9/12/2017	JASMINE STREET (211)	Named Storm	22	3,317	72,978
9/12/2017	JASMINE STREET (211)	Named Storm	5	3,416	17,079
9/12/2017	JASMINE STREET (211)	Named Storm	5	3,413	17,065
9/12/2017	JASMINE STREET (211)	Named Storm	1	2,419	2,419
9/12/2017	JASMINE STREET (211)	Named Storm	1	2,328	2,328
9/12/2017	PARKWAY SOUTH (104)	Named Storm	1	4,366	4,366
9/12/2017	212 (212)	Named Storm	18	2,528	45,508
9/12/2017	212 (212)	Named Storm	36	2,697	97,100
9/12/2017	212 (212)	Named Storm	1	1,098	1,098
9/12/2017	212 (212)	Named Storm	16	2,621	41,934
9/12/2017	212 (212)	Named Storm	89	1,206	107,319
9/12/2017	212 (212)	Named Storm	33	2,665	87,942
9/12/2017	JASMINE STREET (211)	Named Storm	1	3,160	3,160
9/12/2017	SOUTH FLETCHER (102)	Named Storm	125	1,599	199,833
9/12/2017	SOUTH FLETCHER (102)	Named Storm	9	1,653	14,879
9/12/2017	SOUTH FLETCHER (102)	Named Storm	11	2,895	31,842
9/12/2017	SOUTH FLETCHER (102)	Named Storm	7	1,652	11,564
9/12/2017	SOUTH FLETCHER (102)	Named Storm	6	2,985	17,908

9/12/2017	SOUTH FLETCHER (102)	Named Storm	164	1,650	270,611
9/12/2017	SOUTH FLETCHER (102)	Named Storm	40	1,652	66,085
9/12/2017	SOUTH FLETCHER (102)	Named Storm	50	153	7,655
9/12/2017	SOUTH FLETCHER (102)	Named Storm	55	2,824	155,347
9/12/2017	SOUTH FLETCHER (102)	Named Storm	7	2,826	19,782
9/12/2017	SOUTH FLETCHER (102)	Named Storm	106	2,403	254,693
9/12/2017	SOUTH FLETCHER (102)	Named Storm	24	2,743	65,836
9/12/2017	JASMINE STREET (211)	Named Storm	1	3,601	3,601
9/12/2017	JASMINE STREET (211)	Named Storm	1	2,972	2,972
9/12/2017	JASMINE STREET (211)	Named Storm	42	1,478	62,082
9/12/2017	CLINCH DRIVE (214)	Named Storm	16	1,047	16,749
9/12/2017	CLINCH DRIVE (214)	Named Storm	2	1,045	2,090
9/12/2017	BAILEY (311)	Named Storm	9	639	5,754
9/12/2017	BAILEY (311)	Named Storm	9	1,297	11,677
9/12/2017	BAILEY (311)	Named Storm	5	708	3,540
9/12/2017	BAILEY (311)	Named Storm	33	709	23,381
9/12/2017	BAILEY (311)	Named Storm	41	1,267	51,940
9/12/2017	BAILEY (311)	Named Storm	80	1,267	101,365
9/12/2017	BAILEY (311)	Named Storm	22	735	16,166
9/12/2017	BAILEY (311)	Named Storm	26	2,146	55,808
9/12/2017	BAILEY (311)	Named Storm	1	1,091	1,091
9/12/2017	BAILEY (311)	Named Storm	6	2,723	16,340
9/12/2017	BAILEY (311)	Named Storm	150	1,264	189,585
9/12/2017	BAILEY (311)	Named Storm	4	2,733	10,932
9/12/2017	BAILEY (311)	Named Storm			

			564	875	493,773
9/12/2017	BAILEY (311)	Named Storm	563	952	536,089
9/13/2017	BAILEY (311)	Named Storm	4	2,096	8,386
9/13/2017	BAILEY (311)	Named Storm	1	2,587	2,587
9/13/2017	BONNIEVIEW (310)	Named Storm	1	2,452	2,452
9/13/2017	BAILEY (311)	Named Storm	150	1,517	227,513
9/13/2017	BAILEY (311)	Named Storm	108	1,244	134,357
9/13/2017	BAILEY (311)	Named Storm	45	1,242	55,909
9/13/2017	BAILEY (311)	Named Storm	2	2,174	4,348
9/13/2017	SOUTH FLETCHER (102)	Named Storm	8	1,118	8,942
9/13/2017	SOUTH FLETCHER (102)	Named Storm	10	755	7,547
9/14/2017	JASMINE STREET (211)	Named Storm	1	1,499	1,499
9/14/2017	JASMINE STREET (211)	Named Storm	1	767	767
9/14/2017	JASMINE STREET (211)	Named Storm	1	1,439	1,439
9/14/2017	BAILEY (311)	Named Storm	1	1,567	1,567
9/14/2017	SOUTH FLETCHER (102)	Named Storm	3	101	302
9/14/2017	SOUTH FLETCHER (102)	Named Storm	8	339	2,711
9/14/2017	SOUTH FLETCHER (102)	Named Storm	14	339	4,742
9/14/2017	SOUTH FLETCHER (102)	Named Storm	14	338	4,738
9/14/2017	CLINCH DRIVE (214)	Named Storm	16	1,931	30,899
9/14/2017	BAILEY (311)	Named Storm	8	1,194	9,549
9/14/2017	BONNIEVIEW (310)	Named Storm	1	1,058	1,058
9/14/2017	FIFTEENTH STREET (209)	Named Storm	1	1,081	1,081
9/14/2017	PLANTATION FIELDSIDE (111)	Named Storm	96	108	10,349
9/15/2017	BONNIEVIEW (310)	Named Storm	1	108	108

9/15/2017	JASMINE STREET (211)	Named Storm	1	75	75
9/15/2017	BONNIEVIEW (310)	Named Storm	5	52	262
9/15/2017	BAILEY (311)	Named Storm	7	204	1,426
9/15/2017	PLANTATION FIELDSIDE (111)	Named Storm	1	55	55
9/15/2017	SOUTH FLETCHER (102)	Named Storm	23	67	1,540
9/15/2017	SOUTH FLETCHER (102)	Named Storm	1	54	54
9/15/2017	BAILEY (311)	Named Storm	1	484	484
9/15/2017	BONNIEVIEW (310)	Named Storm	1	67	67
9/15/2017	JASMINE STREET (211)	Named Storm	1	20	20
9/15/2017	BAILEY (311)	Named Storm	1	181	181
9/15/2017	BAILEY (311)	Named Storm	1	308	308
9/15/2017	212 (212)	Named Storm	1	519	519
9/15/2017	PLANTATION FIELDSIDE (111)	Named Storm	1	73	73
9/15/2017	CLINCH DRIVE (214)	Named Storm	1	492	492
9/15/2017	PARKWAY SOUTH (104)	Named Storm	1	17	17
9/15/2017	SOUTH FLETCHER (102)	Named Storm	1	9	9
9/15/2017	JASMINE STREET (211)	Named Storm	1	154	154
9/15/2017	BONNIEVIEW (310)	Named Storm	1	164	164
9/15/2017	210 (210)	Named Storm	1	12	12
9/15/2017	BAILEY (311)	Named Storm	1	289	289
9/15/2017	JASMINE STREET (211)	Named Storm	1	11	11
9/15/2017	210 (210)	Named Storm	1	110	110
9/15/2017	JASMINE STREET (211)	Named Storm	1	206	206
9/15/2017	SOUTH FLETCHER (102)	Named Storm	2	187	374
9/15/2017	BAILEY (311)	Named Storm			

			1	248	248
9/15/2017	212 (212)	Named Storm	1	9	9
9/15/2017	212 (212)	Named Storm	1	325	325
9/15/2017	BAILEY (311)	Named Storm	1	276	276
9/15/2017	210 (210)	Named Storm	1	312	312
9/15/2017	JASMINE STREET (211)	Named Storm	1	179	179
9/15/2017	PLANTATION FIELDSIDE (111)	Named Storm	1	117	117
9/15/2017	PLANTATION FIELDSIDE (111)	Named Storm	2	243	485
9/15/2017	JASMINE STREET (211)	Named Storm	1	22	22
9/15/2017	SOUTH FLETCHER (102)	Named Storm	1	53	53
9/15/2017	210 (210)	Named Storm	1	242	242
9/15/2017	BAILEY (311)	Named Storm	1	3	3
9/15/2017	JASMINE STREET (211)	Named Storm	1	143	143
9/15/2017	BAILEY (311)	Named Storm	1	176	176
9/15/2017	FIFTEENTH STREET (209)	Named Storm	1	74	74
9/15/2017	JASMINE STREET (211)	Named Storm	1	125	125
9/16/2017	BONNIEVIEW (310)	Named Storm	1	463	463
9/16/2017	JASMINE STREET (211)	Named Storm	7	32	226
9/16/2017	SADLER NECTARINE SO.14TH (215)	Named Storm	5	49	245
9/16/2017	CLINCH DRIVE (214)	Named Storm	1	35	35
9/17/2017	212 (212)	Named Storm	40	114	4,574
9/17/2017	CLINCH DRIVE (214)	Named Storm	1	85	85
9/18/2017	BAILEY (311)	Named Storm	9	40	360
9/19/2017	PLANTATION ROADSIDE (110)	Named Storm	12	63	761
9/19/2017	SOUTH FLETCHER (102)	Named Storm	1	239	239

9/19/2017	JASMINE STREET (211)	Named Storm	3	33	99
9/19/2017	JASMINE STREET (211)	Named Storm	2	204	407
9/19/2017	JASMINE STREET (211)	Named Storm	1	71	71
9/19/2017	JASMINE STREET (211)	Named Storm	1	35	35
9/21/2017	JASMINE STREET (211)	Named Storm	1	31	31
9/21/2017	PLANTATION ROADSIDE (110)	Named Storm	1	271	271
9/22/2017	212 (212)	Named Storm	3	86	258
9/24/2017	BONNIEVIEW (310)	Named Storm	12	35	420
9/25/2017	SOUTH FLETCHER (102)	Named Storm	1	56	56
9/29/2017	CLINCH DRIVE (214)	Named Storm	35	47	1,648
9/29/2017	CLINCH DRIVE (214)	Named Storm	1	54	54
9/30/2017	SOUTH FLETCHER (102)	Named Storm	23	116	2,664
9/30/2017	SOUTH FLETCHER (102)	Named Storm	1	1	1
9/30/2017	SOUTH FLETCHER (102)	Named Storm	1	76	76
9/30/2017	212 (212)	Named Storm	1	227	227
9/30/2017	SOUTH FLETCHER (102)	Named Storm	1	432	432
9/30/2017	FIFTEENTH STREET (209)	Named Storm	22	132	2,899
9/30/2017	CLINCH DRIVE (214)	Named Storm	542	82	44,354
9/30/2017	212 (212)	Named Storm	46	322	14,817
9/30/2017	JASMINE STREET (211)	Named Storm	7	144	1,005
9/30/2017	SOUTH FLETCHER (102)	Named Storm	50	125	6,229
10/11/2017	210 (210)	Planned Outage	13	24	307
10/24/2017	BAILEY (311)	Planned Outage	1	7	7
10/24/2017	BAILEY (311)	Planned Outage	1	9	9
10/24/2017	BAILEY (311)	Planned Outage			

			1	9	9
10/31/2017	BAILEY (311)	Planned Outage	1	7	7
11/7/2017	BAILEY (311)	Planned Outage	1	3	3
11/7/2017	BAILEY (311)	Planned Outage	1	2	2
11/7/2017	BAILEY (311)	Planned Outage	1	4	4
12/12/2017	STEPDOWN (22)	Substation	16,011	13	208,143

2017 NW Division Excluded Events					
Date	Feeder	Exclusion	Alt Crew	IL	OMI
1/4/2017	SOUTH STREET (9854)	Planned Outage	13	29	382
1/10/2017	HWY 90W (9992)	Planned Outage	8	29	235
1/21/2017	ALHA (9952)	EOC Event	85	70	5,913
1/22/2017	BLOUNTSTOWN (9972)	EOC Event	27	259	6,996
1/22/2017	BRISTOL (9882)	EOC Event	83	71	5,925
1/22/2017	BRISTOL (9882)	EOC Event	3	136	409
1/22/2017	ALHA (9952)	EOC Event	2	214	428
1/22/2017	BRISTOL (9882)	EOC Event	795	150	119,250
1/22/2017	ALHA (9952)	EOC Event	107	166	17,810
1/22/2017	BRISTOL (9882)	EOC Event	230	228	52,329
1/22/2017	BRISTOL (9882)	EOC Event	113	32	3,616
1/23/2017	BRISTOL (9882)	EOC Event	1	59	59
1/23/2017	BRISTOL (9882)	EOC Event	1	172	172
1/30/2017	HWY 90W (9992)	Planned Outage	23	90	2,080
1/30/2017	HWY 90W (9992)	Planned Outage	10	53	527
2/7/2017	SOUTH STREET (9854)	EOC Event			



			1,869	499	932,631
2/7/2017	HOSPITAL (9872)	EOC Event	126	172	21,731
2/7/2017	COLLEGE (9982)	EOC Event	1,184	110	130,240
2/7/2017	GREENWOOD (9742)	EOC Event	670	310	207,923
2/7/2017	GREENWOOD (9742)	EOC Event	52	415	21,573
2/7/2017	DOGWOOD HEIGHTS (9722)	EOC Event	7	170	1,192
2/7/2017	COTTONDALE (9866)	EOC Event	18	200	3,598
2/7/2017	INDIAN SPRINGS (9932)	EOC Event	30	455	13,654
2/7/2017	INDIAN SPRINGS (9932)	EOC Event	7	298	2,085
2/7/2017	INDIAN SPRINGS (9932)	EOC Event	1	300	300
2/7/2017	HWY 90W (9992)	EOC Event	4	1,075	4,302
2/7/2017	HWY 90E (9942)	EOC Event	24	348	8,352
2/7/2017	INDIAN SPRINGS (9932)	EOC Event	60	116	6,960
2/7/2017	HWY 90E (9942)	EOC Event	2	379	758
2/7/2017	COTTONDALE (9866)	EOC Event	15	190	2,849
2/7/2017	HWY 90E (9942)	EOC Event	2	369	738
2/7/2017	COTTONDALE (9866)	EOC Event	11	311	3,421
2/7/2017	HWY 90W (9992)	EOC Event	35	927	32,457
2/7/2017	BLOUNTSTOWN (9972)	EOC Event	22	172	3,778
2/7/2017	COTTONDALE (9866)	EOC Event	1	1,481	1,481
2/7/2017	HWY 90E (9942)	EOC Event	1	205	205
2/7/2017	HWY 90E (9942)	EOC Event	9	250	2,250
2/7/2017	HWY 90E (9942)	EOC Event	2	194	388
2/7/2017	HWY 90E (9942)	EOC Event	12	418	5,021
2/7/2017	DOGWOOD HEIGHTS (9722)	EOC Event			

			8	129	1,032
2/7/2017	HOSPITAL (9872)	EOC Event	1	1,225	1,225
2/7/2017	BRISTOL (9882)	EOC Event	28	274	7,672
2/7/2017	RAILROAD (9512)	EOC Event	1	549	549
2/7/2017	INDIAN SPRINGS (9932)	EOC Event	14	116	1,624
2/7/2017	HOSPITAL (9872)	EOC Event	26	470	12,222
2/7/2017	HWY 90E (9942)	EOC Event	3	322	966
2/7/2017	COLLEGE (9982)	EOC Event	18	1,148	20,664
2/7/2017	COTTONDALE (9866)	EOC Event	6	136	818
2/7/2017	COLLEGE (9982)	EOC Event	21	398	8,350
2/7/2017	COLLEGE (9982)	EOC Event	12	1,435	17,220
2/7/2017	DOGWOOD HEIGHTS (9722)	EOC Event	1	1,451	1,451
2/7/2017	HOSPITAL (9872)	EOC Event	7	1,356	9,494
2/7/2017	COLLEGE (9982)	EOC Event	30	323	9,701
2/7/2017	COLLEGE (9982)	EOC Event	8	264	2,113
2/7/2017	COLLEGE (9982)	EOC Event	1	1,353	1,353
2/7/2017	GREENWOOD (9742)	EOC Event	670	38	25,460
2/7/2017	COTTONDALE (9866)	EOC Event	11	606	6,663
2/7/2017	HWY 90E (9942)	EOC Event	1	104	104
2/7/2017	COLLEGE (9982)	EOC Event	9	90	806
2/8/2017	COLLEGE (9982)	EOC Event	1	35	35
2/8/2017	SOUTH STREET (9854)	EOC Event	2,147	107	229,729
2/8/2017	GREENWOOD (9742)	EOC Event	12	130	1,554
2/8/2017	INDIAN SPRINGS (9932)	EOC Event	5	1,042	5,209
2/8/2017	INDIAN SPRINGS (9932)	EOC Event			

			18	26	470
2/8/2017	SOUTH STREET (9854)	EOC Event	68	335	22,788
2/8/2017	SOUTH STREET (9854)	EOC Event	148	173	25,594
2/8/2017	SOUTH STREET (9854)	EOC Event	376	198	74,611
2/8/2017	SOUTH STREET (9854)	EOC Event	24	264	6,340
2/8/2017	SOUTH STREET (9854)	EOC Event	38	244	9,272
2/8/2017	HWY 90E (9942)	EOC Event	29	165	4,783
2/8/2017	SOUTH STREET (9854)	EOC Event	42	294	12,348
2/8/2017	SOUTH STREET (9854)	EOC Event	19	172	3,268
2/8/2017	SOUTH STREET (9854)	EOC Event	1	975	975
2/8/2017	HWY 90E (9942)	EOC Event	2	261	522
2/8/2017	SOUTH STREET (9854)	EOC Event	20	75	1,509
2/8/2017	SOUTH STREET (9854)	EOC Event	5	1,186	5,931
2/8/2017	COLLEGE (9982)	EOC Event	1	604	604
2/8/2017	SOUTH STREET (9854)	EOC Event	3	688	2,064
2/8/2017	SOUTH STREET (9854)	EOC Event	2	934	1,868
2/8/2017	SOUTH STREET (9854)	EOC Event	1	308	308
2/8/2017	INDIAN SPRINGS (9932)	EOC Event	1	767	767
2/8/2017	COTTONDALE (9866)	EOC Event	1	644	644
2/8/2017	HWY 90E (9942)	EOC Event	2	1,083	2,165
2/8/2017	SOUTH STREET (9854)	EOC Event	2	903	1,806
2/8/2017	SOUTH STREET (9854)	EOC Event	20	29	581
2/8/2017	COTTONDALE (9866)	EOC Event	1	1,309	1,309
2/8/2017	COTTONDALE (9866)	EOC Event	2	1,309	2,618
2/8/2017	SOUTH STREET (9854)	EOC Event			

			3	1,001	3,002
2/8/2017	COLLEGE (9982)	EOC Event	1	568	568
2/8/2017	COLLEGE (9982)	EOC Event	1	497	497
2/8/2017	HWY 90E (9942)	EOC Event	1	851	851
2/8/2017	SOUTH STREET (9854)	EOC Event	2	628	1,255
2/8/2017	COLLEGE (9982)	EOC Event	1	502	502
2/8/2017	SOUTH STREET (9854)	EOC Event	2	815	1,629
2/8/2017	SOUTH STREET (9854)	EOC Event	1	799	799
2/8/2017	GREENWOOD (9742)	EOC Event	1	387	387
2/8/2017	SOUTH STREET (9854)	EOC Event	1	299	299
2/8/2017	COLLEGE (9982)	EOC Event	14	69	966
2/8/2017	SOUTH STREET (9854)	EOC Event	1	354	354
2/8/2017	COLLEGE (9982)	EOC Event	10	64	640
2/9/2017	HWY 90E (9942)	EOC Event	24	50	1,191
2/9/2017	HWY 90E (9942)	Planned Outage	22	59	1,298
2/14/2017	COLLEGE (9982)	Planned Outage	5	26	130
2/14/2017	HWY 90W (9992)	Planned Outage	10	34	340
2/16/2017	SOUTH STREET (9854)	Planned Outage	71	24	1,735
2/17/2017	HWY 90E (9942)	Planned Outage	2	22	44
3/16/2017	ALTHA (9952)	Planned Outage	108	68	7,344
3/22/2017	INDIAN SPRINGS (9932)	Planned Outage	13	51	663
3/23/2017	BRISTOL (9882)	Planned Outage	11	85	935
3/28/2017	COLLEGE (9982)	Planned Outage	18	66	1,188
3/28/2017	COLLEGE (9982)	Planned Outage	16	63	1,008
4/11/2017	COLLEGE (9982)	Planned Outage			

			1	41	41
4/13/2017	SOUTH STREET (9854)	Planned Outage	50	48	2,402
4/13/2017	INDIAN SPRINGS (9932)	Planned Outage	8	84	671
4/17/2017	INDIAN SPRINGS (9932)	Planned Outage	1	13	13
5/2/2017	GREENWOOD (9742)	Planned Outage	1	27	27
5/2/2017	GREENWOOD (9742)	Planned Outage	6	68	408
5/11/2017	RAILROAD (9512)	Planned Outage	19	293	5,570
5/11/2017	SOUTH STREET (9854)	Planned Outage	248	16	3,889
5/11/2017	SOUTH STREET (9854)	Planned Outage	56	277	15,539
5/17/2017	HOSPITAL (9872)	Planned Outage	4	23	93
5/22/2017	GREENWOOD (9742)	Planned Outage	10	25	248
5/22/2017	INDIAN SPRINGS (9932)	Planned Outage	1	225	225
5/23/2017	SOUTH STREET (9854)	Planned Outage	6	11	66
6/2/2017	COLLEGE (9982)	Planned Outage	7	53	373
6/8/2017	HWY 90E (9942)	Planned Outage	42	18	751
6/19/2017	HWY 90E (9942)	Named Storm	12	67	799
6/19/2017	COTTONDALE (9866)	Named Storm	13	62	811
6/20/2017	SOUTH STREET (9854)	Named Storm	1	39	39
6/20/2017	DOGWOOD HEIGHTS (9722)	Named Storm	8	54	431
6/20/2017	BRISTOL (9882)	Named Storm	14	96	1,344
6/20/2017	SOUTH STREET (9854)	Named Storm	11	42	467
6/20/2017	HOSPITAL (9872)	Named Storm	5	25	125
6/20/2017	HWY 90W (9992)	Named Storm	2	20	40
6/20/2017	COTTONDALE (9866)	Named Storm	31	48	1,493
6/20/2017	INDIAN SPRINGS (9932)	Named Storm			

			1	49	49
6/20/2017	SOUTH STREET (9854)	Named Storm	3	42	125
6/21/2017	HWY 90E (9942)	Named Storm	54	101	5,433
6/21/2017	HWY 90E (9942)	Named Storm	7	66	464
6/21/2017	INDIAN SPRINGS (9932)	Named Storm	29	43	1,242
6/21/2017	COTTONDALE (9866)	Named Storm	21	47	986
6/21/2017	HWY 90W (9992)	Named Storm	8	39	315
6/21/2017	HWY 90E (9942)	Named Storm	8	61	490
6/21/2017	BRISTOL (9882)	Named Storm	1	99	99
6/21/2017	INDIAN SPRINGS (9932)	Named Storm	13	76	982
6/21/2017	SOUTH STREET (9854)	Named Storm	1	235	235
6/21/2017	COLLEGE (9982)	Named Storm	30	125	3,757
6/22/2017	COTTONDALE (9866)	Named Storm	2	41	82
6/27/2017	COLLEGE (9982)	Planned Outage	5	213	1,063
7/7/2017	COTTONDALE (9866)	Planned Outage	1,494	57	84,809
7/13/2017	INDIAN SPRINGS (9932)	Planned Outage	54	169	9,143
8/8/2017	SOUTH STREET (9854)	Planned Outage	1	7	7
8/8/2017	SOUTH STREET (9854)	Planned Outage	1	7	7
8/9/2017	SOUTH STREET (9854)	Planned Outage	1	4	4
8/9/2017	SOUTH STREET (9854)	Planned Outage	1	2	2
8/9/2017	SOUTH STREET (9854)	Planned Outage	1	61	61
8/9/2017	SOUTH STREET (9854)	Planned Outage	1	2	2
8/9/2017	SOUTH STREET (9854)	Planned Outage	1	50	50
8/9/2017	SOUTH STREET (9854)	Planned Outage	1	37	37
8/24/2017	INDUSTRIAL PARK (9752)	Substation			

			47	82	3,854
8/28/2017	HWY 90E (9942)	Planned Outage	20	325	6,506
8/28/2017	INDIAN SPRINGS (9932)	Planned Outage	10	7	70
8/29/2017	RAILROAD (9512)	Named Storm	570	47	26,572
8/29/2017	DOGWOOD HEIGHTS (9722)	Named Storm	12	20	245
8/29/2017	ALTHA (9952)	Named Storm	19	54	1,031
8/29/2017	RAILROAD (9512)	Named Storm	85	72	6,147
8/29/2017	SOUTH STREET (9854)	Named Storm	1	68	68
8/30/2017	HWY 90E (9942)	Named Storm	1	35	35
8/30/2017	HWY 90E (9942)	Named Storm	12	86	1,032
8/30/2017	HOSPITAL (9872)	Named Storm	19	84	1,605
8/30/2017	SOUTH STREET (9854)	Named Storm	14	120	1,677
8/30/2017	HWY 90E (9942)	Named Storm	1	61	61
8/30/2017	SOUTH STREET (9854)	Named Storm	20	96	1,912
8/30/2017	COLLEGE (9982)	Named Storm	3	62	187
8/31/2017	DOGWOOD HEIGHTS (9722)	Named Storm	28	11	313
8/31/2017	SOUTH STREET (9854)	Named Storm	72	114	8,222
8/31/2017	SOUTH STREET (9854)	Named Storm	188	38	7,116
8/31/2017	HWY 90E (9942)	Named Storm	1	51	51
8/31/2017	COTTONDALE (9866)	Named Storm	66	54	3,592
8/31/2017	SOUTH STREET (9854)	Named Storm	74	41	3,029
8/31/2017	INDIAN SPRINGS (9932)	Named Storm	1	79	79
8/31/2017	SOUTH STREET (9854)	Planned Outage	1	9	9
8/31/2017	COTTONDALE (9866)	Named Storm	259	38	9,782
8/31/2017	COTTONDALE (9866)	Named Storm			

			2	40	79
9/9/2017	COTTONDALE (9866)	Named Storm	1,487	50	73,607
9/10/2017	COLLEGE (9982)	Named Storm	1	44	44
9/10/2017	SOUTH STREET (9854)	Named Storm	377	82	31,052
9/10/2017	COTTONDALE (9866)	Named Storm	42	118	4,957
9/10/2017	HWY 90W (9992)	Named Storm	8	354	2,831
9/10/2017	HWY 90E (9942)	Named Storm	8	330	2,642
9/10/2017	HOSPITAL (9872)	Named Storm	6	221	1,329
9/10/2017	COTTONDALE (9866)	Named Storm	4	118	472
9/10/2017	ALTHA (9952)	Named Storm	108	84	9,095
9/10/2017	HWY 90E (9942)	Named Storm	20	104	2,088
9/10/2017	HWY 90E (9942)	Named Storm	55	39	2,160
9/10/2017	COLLEGE (9982)	Named Storm	3	168	503
9/10/2017	INDIAN SPRINGS (9932)	Named Storm	1	66	66
9/10/2017	PRISON (9732)	Named Storm	3	84	252
9/10/2017	PRISON (9732)	Named Storm	2	7	13
9/10/2017	SOUTH STREET (9854)	Named Storm	6	86	515
9/10/2017	HOSPITAL (9872)	Named Storm	3	22	65
9/10/2017	HOSPITAL (9872)	Named Storm	1	18	18
9/10/2017	BRISTOL (9882)	Named Storm	1	74	74
9/10/2017	ALTHA (9952)	Named Storm	31	133	4,131
9/10/2017	GREENWOOD (9742)	Named Storm	1	184	184
9/11/2017	SOUTH STREET (9854)	Named Storm	30	176	5,288
9/11/2017	COLLEGE (9982)	Named Storm	9	213	1,919
9/11/2017	DOGWOOD HEIGHTS (9722)	Named Storm			



			45	68	3,054
9/11/2017	HWY 90E (9942)	Named Storm	18	1,177	21,186
9/11/2017	RAILROAD (9512)	Named Storm	2	72	143
9/11/2017	COLLEGE (9982)	Named Storm	153	207	31,674
9/11/2017	HWY 90W (9992)	Named Storm	4	90	361
9/11/2017	Caverns Rd Sub	Named Storm	1,549	1,031	1,596,606
9/11/2017	ALTHA (9952)	Named Storm	84	142	11,932
9/11/2017	SOUTH STREET (9854)	Named Storm	1,157	168	194,723
9/11/2017	BRISTOL (9882)	Named Storm	10	84	839
9/11/2017	COLLEGE (9982)	Named Storm	3	2,117	6,351
9/11/2017	BRISTOL (9882)	Named Storm	24	106	2,556
9/11/2017	BRISTOL (9882)	Named Storm	106	23	2,482
9/11/2017	COTTONDALE (9866)	Named Storm	24	389	9,345
9/11/2017	COLLEGE (9982)	Named Storm	11	19	206
9/11/2017	INDIAN SPRINGS (9932)	Named Storm	6	1,977	11,863
9/11/2017	INDIAN SPRINGS (9932)	Named Storm	1	1,743	1,743
9/11/2017	COLLEGE (9982)	Named Storm	24	291	6,995
9/11/2017	HOSPITAL (9872)	Named Storm	1	1,959	1,959
9/11/2017	SOUTH STREET (9854)	Named Storm	78	1,028	80,150
9/11/2017	GREENWOOD (9742)	Named Storm	154	553	85,116
9/11/2017	SOUTH STREET (9854)	Named Storm	13	611	7,947
9/11/2017	INDIAN SPRINGS (9932)	Named Storm	1	110	110
9/11/2017	ALTHA (9952)	Named Storm	14	728	10,197
9/11/2017	HOSPITAL (9872)	Named Storm	14	211	2,956
9/11/2017	COLLEGE (9982)	Named Storm			

			4	522	2,089
9/11/2017	COLLEGE (9982)	Named Storm	7	638	4,465
9/11/2017	RAILROAD (9512)	Named Storm	44	596	26,209
9/11/2017	BLOUNTSTOWN (9972)	Named Storm	204	263	53,652
9/11/2017	COLLEGE (9982)	Named Storm	3	1,674	5,023
9/11/2017	COLLEGE (9982)	Named Storm	16	156	2,496
9/11/2017	COLLEGE (9982)	Named Storm	11	526	5,786
9/11/2017	COTTONDALE (9866)	Named Storm	30	183	5,491
9/11/2017	HWY 90E (9942)	Named Storm	11	1,903	20,937
9/11/2017	SOUTH STREET (9854)	Named Storm	63	998	62,895
9/11/2017	HWY 90W (9992)	Named Storm	23	437	10,044
9/11/2017	HWY 90W (9992)	Named Storm	10	1,888	18,879
9/11/2017	BRISTOL (9882)	Named Storm	235	389	91,345
9/11/2017	HWY 90W (9992)	Named Storm	1	2,488	2,488
9/11/2017	COTTONDALE (9866)	Named Storm	24	130	3,109
9/11/2017	HWY 90E (9942)	Named Storm	11	756	8,313
9/11/2017	COTTONDALE (9866)	Named Storm	17	147	2,507
9/11/2017	HWY 90W (9992)	Named Storm	19	1,089	20,690
9/11/2017	ALTHA (9952)	Named Storm	5	1,185	5,927
9/11/2017	SOUTH STREET (9854)	Named Storm	2	1,629	3,259
9/11/2017	COTTONDALE (9866)	Named Storm	42	1,225	51,435
9/11/2017	COLLEGE (9982)	Named Storm	18	143	2,566
9/11/2017	RAILROAD (9512)	Named Storm	84	387	32,502
9/11/2017	HWY 90E (9942)	Named Storm	8	1,360	10,876
9/11/2017	HOSPITAL (9872)	Named Storm			

			2	2,690	5,380
9/11/2017	INDIAN SPRINGS (9932)	Named Storm	18	507	9,129
9/11/2017	SOUTH STREET (9854)	Named Storm	16	1,338	21,413
9/11/2017	COLLEGE (9982)	Named Storm	1	2,985	2,985
9/11/2017	COLLEGE (9982)	Named Storm	1	266	266
9/11/2017	SOUTH STREET (9854)	Named Storm	127	97	12,334
9/11/2017	HWY 90W (9992)	Named Storm	8	1,704	13,634
9/11/2017	COTTONDALE (9866)	Named Storm	15	925	13,875
9/11/2017	SOUTH STREET (9854)	Named Storm	11	1,549	17,037
9/11/2017	COLLEGE (9982)	Named Storm	6	1,446	8,673
9/11/2017	ALTHA (9952)	Named Storm	1	386	386
9/11/2017	HWY 90W (9992)	Named Storm	23	981	22,555
9/11/2017	INDIAN SPRINGS (9932)	Named Storm	26	357	9,288
9/11/2017	COLLEGE (9982)	Named Storm	24	1,083	25,988
9/11/2017	COTTONDALE (9866)	Named Storm	1	2,537	2,537
9/11/2017	ALTHA (9952)	Named Storm	1	1,178	1,178
9/11/2017	SOUTH STREET (9854)	Named Storm	50	1,374	68,702
9/11/2017	ALTHA (9952)	Named Storm	3	1,076	3,227
9/11/2017	COTTONDALE (9866)	Named Storm	15	1,307	19,607
9/11/2017	HWY 90W (9992)	Named Storm	13	359	4,667
9/11/2017	COLLEGE (9982)	Named Storm	18	233	4,186
9/11/2017	SOUTH STREET (9854)	Named Storm	20	401	8,020
9/11/2017	ALTHA (9952)	Named Storm	1	1,173	1,173
9/11/2017	ALTHA (9952)	Named Storm	1	337	337
9/11/2017	SOUTH STREET (9854)	Named Storm			

			4	1,537	6,149
9/11/2017	COTTONDALE (9866)	Named Storm	3	1,204	3,613
9/11/2017	COTTONDALE (9866)	Named Storm	2	1,162	2,323
9/11/2017	RAILROAD (9512)	Named Storm	12	208	2,494
9/11/2017	SOUTH STREET (9854)	Named Storm	39	275	10,715
9/11/2017	COLLEGE (9982)	Named Storm	1	37	37
9/11/2017	HOSPITAL (9872)	Named Storm	1	46	46
9/11/2017	COLLEGE (9982)	Named Storm	12	974	11,689
9/11/2017	COTTONDALE (9866)	Named Storm	15	604	9,054
9/11/2017	HWY 90E (9942)	Named Storm	13	1,616	21,007
9/11/2017	HWY 90E (9942)	Named Storm	1	1,217	1,217
9/11/2017	COTTONDALE (9866)	Named Storm	1	822	822
9/11/2017	HOSPITAL (9872)	Named Storm	19	1,393	26,471
9/11/2017	SOUTH STREET (9854)	Named Storm	16	1,102	17,628
9/11/2017	INDUSTRIAL PARK (9752)	Named Storm	47	157	7,398
9/11/2017	DOGWOOD HEIGHTS (9722)	Named Storm	311	2	658
9/11/2017	GREENWOOD (9742)	Named Storm	1	560	560
9/11/2017	GREENWOOD (9742)	Named Storm	52	621	32,310
9/12/2017	GREENWOOD (9742)	Named Storm	30	490	14,701
9/12/2017	COTTONDALE (9866)	Named Storm	9	887	7,983
9/12/2017	GREENWOOD (9742)	Named Storm	6	613	3,680
9/12/2017	GREENWOOD (9742)	Named Storm	10	203	2,034
9/12/2017	COLLEGE (9982)	Named Storm	3	207	620
9/12/2017	INDIAN SPRINGS (9932)	Named Storm	3	460	1,380
9/12/2017	ALTHA (9952)	Named Storm			

			7	84	590
9/12/2017	INDIAN SPRINGS (9932)	Named Storm	1	664	664
9/12/2017	COLLEGE (9982)	Named Storm	1	359	359
9/12/2017	COLLEGE (9982)	Named Storm	1	565	565
9/12/2017	GREENWOOD (9742)	Named Storm	5	85	424
9/12/2017	COTTONDALE (9866)	Named Storm	1	795	795
9/12/2017	GREENWOOD (9742)	Named Storm	29	386	11,185
9/12/2017	COTTONDALE (9866)	Named Storm	6	794	4,764
9/12/2017	ALTHA (9952)	Named Storm	5	162	811
9/12/2017	HWY 90E (9942)	Named Storm	3	434	1,302
9/12/2017	RAILROAD (9512)	Named Storm	2	518	1,036
9/12/2017	COTTONDALE (9866)	Named Storm	2	593	1,186
9/12/2017	ALTHA (9952)	Named Storm	1	260	260
9/12/2017	INDIAN SPRINGS (9932)	Named Storm	2	360	720
9/12/2017	INDIAN SPRINGS (9932)	Named Storm	1	581	581
9/12/2017	COLLEGE (9982)	Named Storm	1	455	455
9/12/2017	SOUTH STREET (9854)	Named Storm	3	766	2,299
9/12/2017	HWY 90W (9992)	Named Storm	3	415	1,244
9/12/2017	ALTHA (9952)	Named Storm	1	244	244
9/12/2017	INDIAN SPRINGS (9932)	Named Storm	33	103	3,395
9/12/2017	GREENWOOD (9742)	Named Storm	1	226	226
9/12/2017	HOSPITAL (9872)	Named Storm	3	777	2,330
9/12/2017	SOUTH STREET (9854)	Named Storm	3	105	315
9/12/2017	ALTHA (9952)	Named Storm	1	111	111
9/12/2017	INDIAN SPRINGS (9932)	Named Storm			

			1	56	56
9/12/2017	BRISTOL (9882)	Named Storm	1	194	194
9/12/2017	GREENWOOD (9742)	Named Storm	1	1,216	1,216
9/12/2017	COLLEGE (9982)	Named Storm	1	238	238
9/12/2017	COTTONDALE (9866)	Named Storm	15	294	4,411
9/12/2017	BRISTOL (9882)	Named Storm	2	105	210
9/12/2017	COLLEGE (9982)	Named Storm	1	165	165
9/12/2017	SOUTH STREET (9854)	Named Storm	1	1,251	1,251
9/12/2017	SOUTH STREET (9854)	Named Storm	1	1,249	1,249
9/12/2017	ALTHA (9952)	Named Storm	1	978	978
9/12/2017	COLLEGE (9982)	Named Storm	3	1	4
9/12/2017	COLLEGE (9982)	Named Storm	1	1,419	1,419
9/12/2017	COTTONDALE (9866)	Named Storm	5	644	3,219
9/13/2017	SOUTH STREET (9854)	Named Storm	3	61	182
9/13/2017	HWY 90E (9942)	Named Storm	3	47	142
9/13/2017	INDIAN SPRINGS (9932)	Named Storm	1	160	160
9/13/2017	COLLEGE (9982)	Named Storm	10	136	1,359
9/13/2017	GREENWOOD (9742)	Named Storm	4	125	499
9/13/2017	INDIAN SPRINGS (9932)	Named Storm	1	83	83
9/13/2017	DOGWOOD HEIGHTS (9722)	Named Storm	2	68	137
9/15/2017	Altha Sub	Substation	869	296	257,195
9/15/2017	Blountstown Sub	Substation	1,043	87	90,515
9/25/2017	SOUTH STREET (9854)	Planned Outage	190	14	2,635
9/26/2017	SOUTH STREET (9854)	Planned Outage	1	11	11
10/26/2017	COLLEGE (9982)	Planned Outage			

			4	193	772
11/13/2017	RAILROAD (9512)	Planned Outage	1	36	36
11/15/2017	SOUTH STREET (9854)	Planned Outage	1	16	16
11/20/2017	INDIAN SPRINGS (9932)	Planned Outage	3	21	63
11/29/2017	INDIAN SPRINGS (9932)	Planned Outage	1	23	23
12/12/2017	INDIAN SPRINGS (9932)	Planned Outage	1	87	87
12/21/2017	INDIAN SPRINGS (9932)	Planned Outage	24	269	6,456

## 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 were 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**

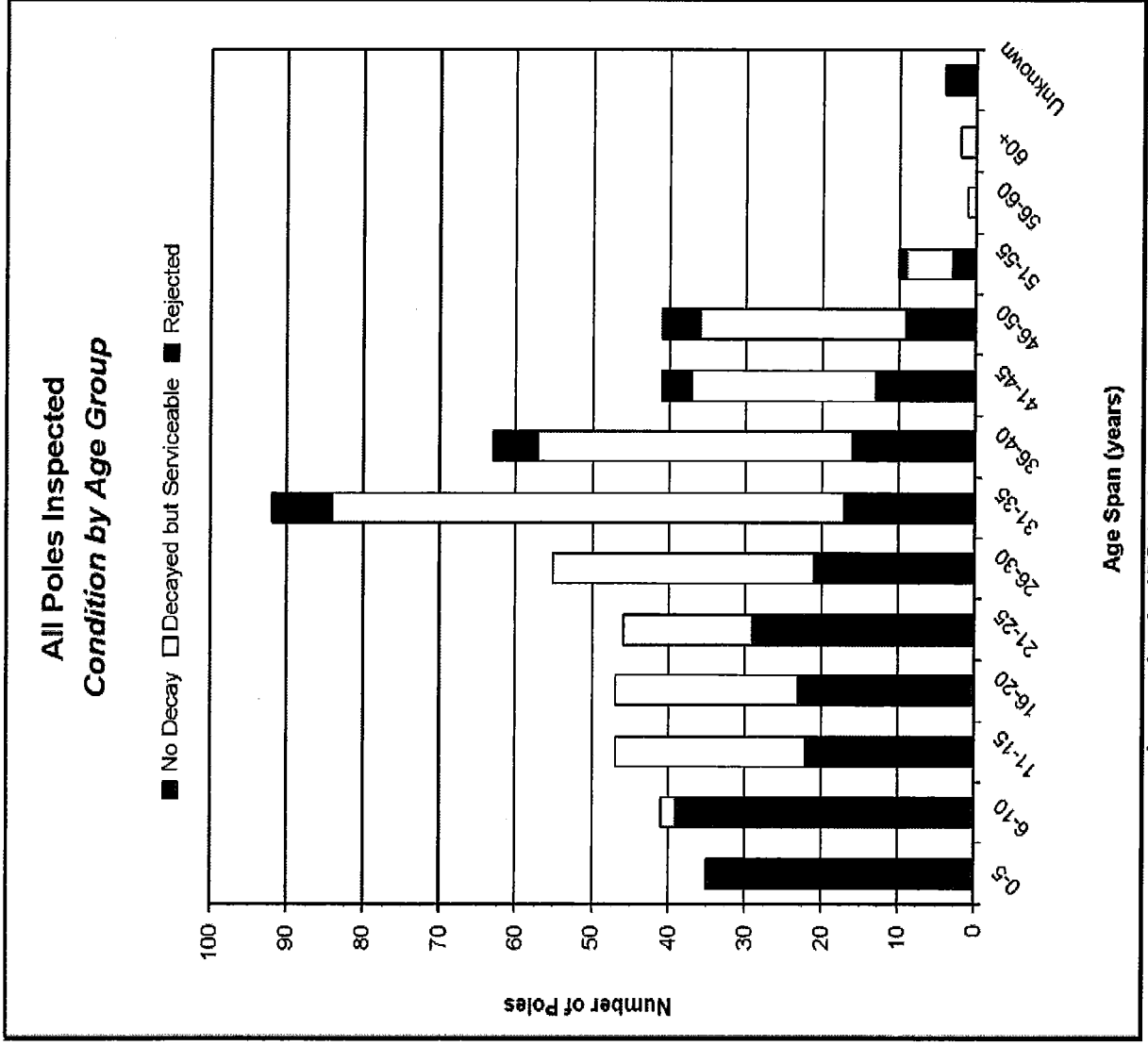
FPUC collects and stores pole inspection data upon completion of annual wood pole inspections. The contractor provides FPUC with wood pole inspection data that includes pole location, size, class, test results, and general comments. The contractor provides inspection summary data via an On-line Data 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 #2 of 2<sup>nd</sup> 8 Year Cycle  
(Inspection Year 2017)**

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
4,998	629	0	525	24	4.57%	20	0	25	0	20	30	1,123	22.47%	646
<p>If d &lt; b, provide explanation</p> <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 second year of the second cycle. Circuits 210, 214 and 215 were inspected and contained only 525 poles</p>														
<p>If g + h &lt; e, provide explanation</p> <p>The inspection took place during the end of the last quarter of 2017. Therefore no time was available to begin replacing decayed poles found during the 2017 inspection cycle.</p>														
<p>Additional Information</p>														

# NE Division



Average Age for All Poles Inspected: 27.6 years

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	%	
0-5			0	0	0	0	0%				35	7%	
6-10			0	2	0	2	4.9%				41	8%	
11-15			0	25	0	25	53.2%				47	9%	
16-20			0	24	0	24	51.1%				47	9%	
21-25			0	17	0	17	37%				46	9%	
26-30			0	34	0	34	61.8%				55	10%	
31-35			0	67	0	67	72.8%				92	18%	
36-40			0	41	0	41	65.1%				63	12%	
41-45			0	23	1	24	58.5%				41	8%	
46-50			0	25	2	27	65.9%				41	8%	
51-55			0	6	0	6	60%				10	2%	
56-60			0	1	0	1	100%				1	0%	
60+			0	2	0	2	100%				2	0%	
Unknown			0	0	0	0	0%				4	1%	
<b>Total</b>	<b>231</b>	<b>44%</b>	<b>0</b>	<b>267</b>	<b>3</b>	<b>270</b>	<b>51.4%</b>	<b>0</b>	<b>19</b>	<b>5</b>	<b>24</b>	<b>4.6%</b>	<b>525*</b>

\* Average Age for All Poles Inspected: 27.6 years

**Florida Public Utilities Company - NW Division  
Annual Wood Pole Inspection Report  
Year #2 of 2<sup>nd</sup> 8 year Cycle  
(Inspection Year 2017)**

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
21,550	2,810	0	3,580	181	5.05%	106	0	351	0	180	119	5,460	25.33%	2,682

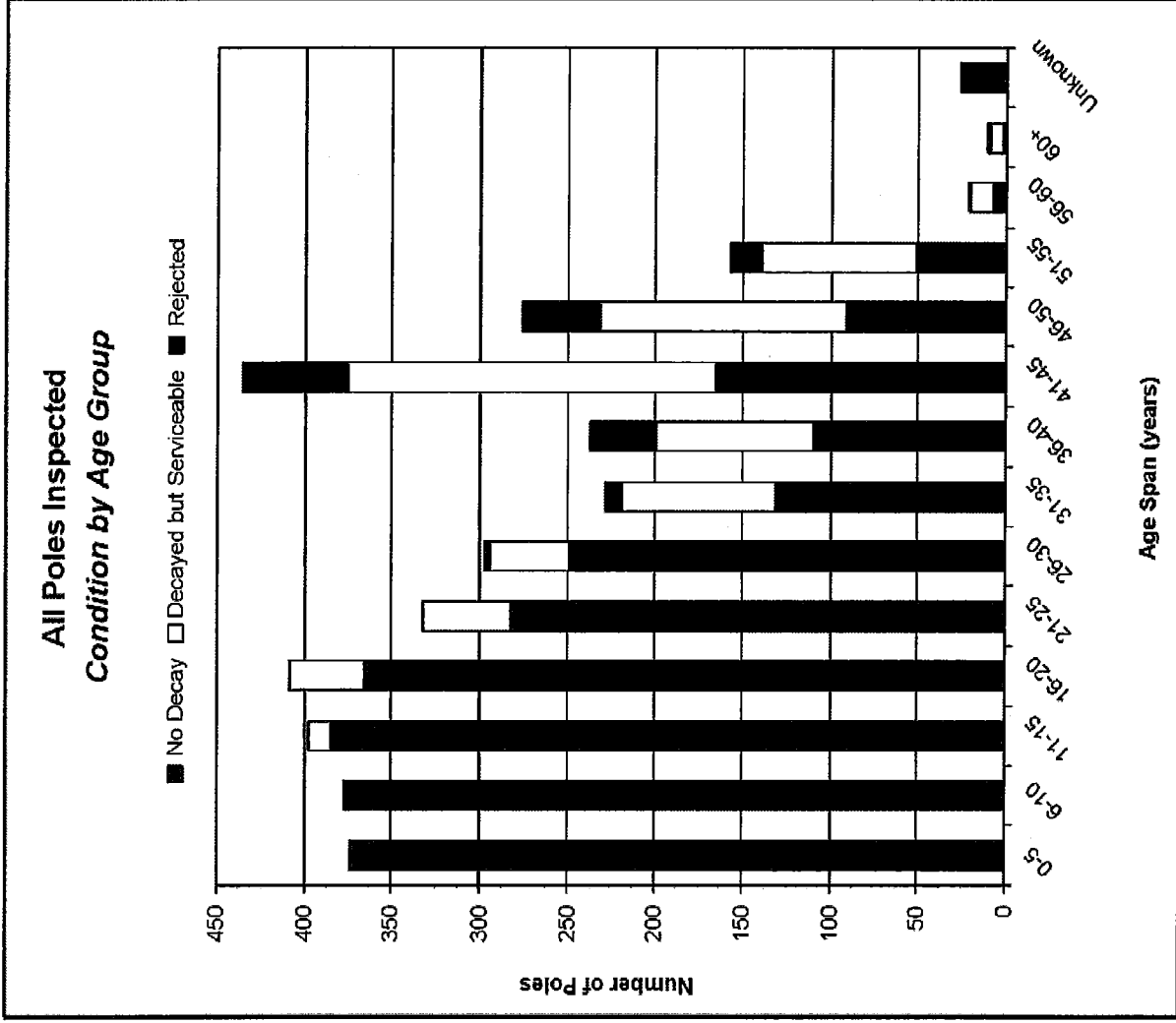
If d < b, provide explanation

If g + h < e, provide explanation

The inspection took place during the end of the last quarter of 2017. Therefore no time was available to begin replacing decayed poles found during the 2017 inspection cycle

Additional information

# NW Division



Average Age for All Poles Inspected: 25.7 years

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			0	0	0	0	0%						374	10%
6-10			0	1	0	1	0.3%						377	11%
11-15			0	13	0	13	3.3%						398	11%
16-20			0	42	0	42	10.3%						409	11%
21-25			0	47	2	49	14.8%						332	9%
26-30			0	45	0	45	15.2%						297	8%
31-35			0	85	2	87	38.2%						228	6%
36-40			0	88	1	89	37.6%						237	7%
41-45			1	207	2	210	48.2%						436	12%
46-50			0	139	2	141	51.1%						276	8%
51-55			4	84	0	88	56.1%						157	4%
56-60			0	13	0	13	59.1%						22	1%
60+			0	7	0	7	63.6%						11	0%
Unknown			0	0	0	0	0%						26	1%
<b>Total</b>	<b>2614</b>	<b>73%</b>	<b>5</b>	<b>771</b>	<b>9</b>	<b>785</b>	<b>21.9%</b>	<b>4</b>	<b>64</b>	<b>113</b>	<b>181</b>	<b>5.1%</b>	<b>3580*</b>	

\* Average Age for All Poles Inspected: 25.7 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 2017 include:

1. During 2017, each division completed the second 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.

### **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 edition of NESC guidelines for extreme wind loading conditions. The new installations were coordinated with joint users. During 2017, 20 reject poles were replaced in the NE Division, and 106 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 – 2017

	Feeders			Laterals		
	Unadjusted	Adjusted	Diff.	Unadjusted	Adjusted	Diff.
(A) Number of Outages	2	2	0	352	352	0
(B) Customer Interruptions	2,964	2,964	0	12,789	12,789	0
(C) Miles Cleared	29.20	29.20	0	85.59	85.59	0
(D) Remaining Miles (Note 1, 2 & 3)	129.90	129.90	0	17.03	17.03	0
(E) Outages per Mile [A ÷ (C + D)]	0.0126	0.0126	0.00	3.43	3.43	0.00
(F) Vegetation CI per Mile [B ÷ (C + D)]	18.63	18.63	0.00	124.62	124.62	0.00
(G) Number of Hotspot trims	156	156	0	NA	NA	NA
(H) All Vegetation Management Costs	\$893,332	\$893,332	0	(Note 4)	(Note 4)	(Note 4)
(I) Customer Minutes of Interruption	147,495	147,495	0	877,815	877,815	0
(J) Outage restoration costs	(Note 5)	(Note 5)	0	NA	NA	NA
(K) Vegetation Budget (current year)	\$928,588	\$928,588	\$-	NA	NA	NA
(L) Vegetation Goal (current year)	\$928,588	\$928,588	\$-	NA	NA	NA
(M) Vegetation Budget (next year)	\$1,011,421	\$1,011,421	\$-	NA	NA	NA
(N) Vegetation Goal (next year)	\$1,011,421	\$1,011,421	\$-	NA	NA	NA
(O) Trim-Back Distance	(Note 6)	(Note 6)	0	(Note 6)	(Note 6)	NA

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

- a) Number of danger trees removed? 170
- b) Expenditures on danger tree removal? \$34,000 (Estimated \$200/Tree)
- 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 2017 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 – 2017

	Feeders			Laterals		
	Unadjusted	Adjusted	Diff.	Unadjusted	Adjusted	Diff.
(A) Number of Outages	1	1	0	39	39	0
(B) Customer Interruptions	2,435	2,435	0	730	730	0
(C) Miles Cleared (Notes 1 & 2)	14.31	14.31	0	30.92	30.92	0
(D) Remaining Miles (Note 2 & 3)	38.90	38.90	0	-33.66	-33.66	0
(E) Outages per Mile [A ÷ (C + D)]	0.0188	0.0188	0	14.23	14.23	0
(F) Vegetation CI per Mile [B ÷ (C + D)]	45.76	45.76	0	266.42	266.42	0
(G) Number of Hotspot trims	156	156	0	NA	NA	NA
(H) All Vegetation Management Costs	\$244,899	\$244,899	0	(Note 4)	(Note 4)	(Note 4)
(I) Customer Minutes of Interruption	90,866	90,866	0	81,871	81,871	0
(J) Outage restoration costs	(Note 5)	(Note 5)	NA	NA	NA	NA
(K) Vegetation Budget (current year)	\$275,711	\$275,711	\$-	NA	NA	NA
(L) Vegetation Goal (current year)	\$275,711	\$275,711	\$-	NA	NA	NA
(M) Vegetation Budget (next year)	\$321,385	\$321,385	\$-	NA	NA	NA
(N) Vegetation Goal (next year)	\$321,385	\$321,385	\$-	NA	NA	NA
(O) Trim-Back Distance	(Note 6)	(Note 6)	0	(Note 6)	(Note 6)	NA

Danger Trees (NE Division) – Additional Questions

- a) Number of danger trees removed? 44
- b) Expenditures on danger tree removal? 8,800 (Estimated \$200/Tree)
- 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 2017 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 – 2017

	Feeders			Laterals		
	Unadjusted	Adjusted	Diff.	Unadjusted	Adjusted	Diff.
(A) Number of Outages	1	1	0	313	313	0
(B) Customer Interruptions	529	529	0	12,059	12,059	0
(C) Miles Cleared (note 1 & 2)	14.89	14.89	0	54.67	54.67	0
(D) Remaining Miles	91.00	91.00	0	50.69	50.69	0
(E) Outages per Mile [A ÷ (C + D)]	0.009	0.009	0	2.97	2.97	0
(F) Vegetation CI per Mile [B ÷ (C + D)]	4.99	4.99	0	114.45	114.45	0
(G) Number of Hotspot trims	0	0	0	NA	NA	NA
(H) All Vegetation Management Costs	\$648,433	\$648,433	0	(Note 4)	(Note 4)	
(I) Customer Minutes of Interruption	56,629	56,629	0	795,944	795,944	0
(J) Outage restoration costs	(Note 5)	(Note 5)	NA	NA	NA	NA
(K) Vegetation Budget (current year)	\$652,877	\$652,877	0	NA	NA	NA
(L) Vegetation Goal (current year)	\$652,877	\$652,877	0	NA	NA	NA
(M) Vegetation Budget (next year)	\$690,036	\$690,036	0	NA	NA	NA
(N) Vegetation Goal (next year)	\$690,036	\$690,036	0	NA	NA	NA
(O) Trim-Back Distance	10	10	NA	10	10	NA

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

- a) Number of danger trees removed? 126
- b) Expenditures on danger tree removal? \$25,200 (Estimated \$200/Tree)
- 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 2017 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  
2018 – 2020**

- 2018**
1. OCB#9866: Cottondale Feeder
  2. OCB#9854: South Street Feeder
  3. OCB#9512: Railroad Feeder
  4. OCB#9992: HWY 90 East Feeder
  5. OCB#9982: College Feeder
  6. OCB#9742: Greenwood/Malone Feeder
- 2019**
1. OCB#9972: Blountstown Feeder
  2. OCB#9882: Bristol Feeder
  3. OCB#9952: Altha Feeder
  4. OCB#9872: Hospital Feeder
  5. OCB#9782: Family Dollar Feeder
- 2020**
1. OCB#9932: Indian Springs Feeder
  2. OCB#9752: Industrial Park Feeder
  3. OCB#9922: Dogwood Heights Feeder
  4. OCB#9732: Prison Feeder
  5. OCB# 9782: HWY 90 West Feeder

**NW TREE TRIM SCHEDULE – LATERALS  
2018 – 2023**

- 2018**
- 1 OCB#9866: Cottondale Feeder
  2. OCB#9742: Greenwood/Malone Feeder
  3. OCB#9854: South Street Feeder
- 2019**
1. OCB#9972: Blountstown Feeder
  2. OCB#9952: Bristol Feeder
  3. OCB# 9952: Altha Feeder
- 2020**
1. OCB#9932: Indian Springs Feeder
  2. OCB#9722: Dogwood Heights Feeder
- 2021**
1. OCB#9982: College Feeder
  2. OCB#9942: HWY 90 East Feeder
  3. OCB#9512: Railroad Feeder
- 2022**
1. OCB#9782: Family Dollar Feeder
  2. OCB#9872: Hospital Feeder
- 2023**
1. OCB#9752: Industrial Park Feeder
  2. OCB#9732: Prison Feeder
  3. OCB#9782: HWY 90 West Feeder

**NE DIVISION - TREE TRIM SCHEDULE – MAIN FEEDERS**

**2018 – 2020**

- 2018**
1. Feeder #211
  2. Feeder #313 (69KV)
  3. Feeder #201 (69KV)
  4. Feeder #315 (69KV)
  5. Feeder #202 (69KV)
  6. Feeder #212
  7. Feeder #310

- 2019**
1. Feeder #311
  2. Feeder #104
  3. Feeder #210
  4. Feeder #215
  5. Feeder #214

- 2020**
1. Feeder #802 (138KV)
  2. Feeder #803 (138KV)
  3. Feeder #209
  4. Feeder #102
  5. Feeder #110
  6. Feeder #111

**NE DIVISION - TREE TRIM SCHEDULE – LATERALS  
2018 – 2023**

- 2018**
1. Feeder #211
  2. Feeder #212

- 2019**
1. Feeder #310
  2. Feeder #311

- 2020**
1. Feeder #215
  2. Feeder #210

- 2021**
1. Feeder #214
  2. Feeder #102

- 2022**
1. Feeder #209
  2. Feeder #104

- 2023**
1. Feeder #110
  2. Feeder #111



## 2017 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	0.04	0.00	0.00	1.67
311	27,672	260	52,529	95,681	5.24	0.05	18.12	9.95	15.19	18.17
310	16,080	1,485	32,580	51,837	3.05	0.28	9.82	6.17	9.22	10.10
209	25,423	1,062	22,253	37,236	4.81	0.20	7.05	4.21	9.03	7.25
210	9,990	2,245	27,961	6,700	1.89	0.43	1.27	5.30	7.19	1.69
211	13,992	225	60,222	23,852	2.65	0.04	4.52	11.41	14.06	4.56
212	17,477	110	55,966	8,505	3.31	0.02	1.61	10.60	13.91	1.63
214	14,935	305	22,435	3,491	2.83	0.06	0.66	4.25	7.08	0.72
215	11,264	1,250	14,549	38,850	2.13	0.24	7.36	2.76	4.89	7.59
102	19,249	2,207	37,931	114,746	3.65	0.42	21.73	7.18	10.83	22.15
104	1,438	6,799	0	51,595	0.27	1.29	9.77	0.00	0.27	11.06
110	10,292	0	7,762	163,381	1.95	0.00	30.94	1.47	3.42	30.94
111	10,354	6,020	7,990	90,453	1.96	1.14	17.13	1.51	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>130.02</b>	<b>64.81</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>130.02</b>	<b>64.81</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

## 2017 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	6,300	0	2,895	0	1.19	0.00	0.55	0.00	1.74	0.00
310	2,275	0	9,050	0	0.43	0.00	1.71	0.00	2.14	0.00
209	18,690	0	20,160	0	3.54	0.00	3.82	0.00	7.36	0.00
210	5,600	0	42,375	0	1.06	0.00	8.03	0.00	9.09	0.00
211	0	0	6,200	0	0.00	0.00	1.17	0.00	1.17	0.00
212	9,575	0	46,485	0	1.81	0.00	8.80	0.00	10.62	0.00
214	5,900	0	14,130	0	1.12	0.00	2.68	0.00	3.79	0.00
215	2,230	0	9,110	0	0.42	0.00	1.73	0.00	2.15	0.00
102	3,250	0	11,000	0	0.62	0.00	2.08	0.00	2.70	0.00
104	300	0	0	0	0.06	0.00	0.00	0.00	0.06	0.00
110	14,530	0	1,650	0	2.75	0.00	0.31	0.00	3.06	0.00
111	1,400	0	200	0	0.27	0.00	0.04	0.00	0.30	0.00
<b>Dist. Totals</b>	70,050	0	163,255	0	13.27	0.00	30.92	0.00	44.19	0.00
<b>69KV Line</b>	4,700	Feet			0.89	Miles				
<b>138KV Line</b>	800	Feet			0.15	Miles				
<b>D&amp;T Totals</b>	75,550									

\*\* 2017 Trim Totals

## 2017 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

## 2017 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	13,211	0	28,556	0	2.50	0.00	5.41	0.00	7.91	0.00
90W	0	0	8,495	0	0.00	0.00	1.61	0.00	1.61	0.00
Altha	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
Blountstown	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
Bristol	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
College	18,074	0	95,473	0	3.42	0.00	18.08	0.00	21.51	0.00
Cottondale	1,446	0	39,335	0	0.27	0.00	7.45	0.00	7.72	0.00
Dogwood	5,061	0	14,460	0	0.96	0.00	2.74	0.00	3.70	0.00
Hospital	0	0	8,796	0	0.00	0.00	1.67	0.00	1.67	0.00
Indian Springs	6,506	0	41,050	0	1.23	0.00	7.77	0.00	9.01	0.00
Malone	7,693	0	42,993	0	1.46	0.00	8.14	0.00	9.60	0.00
Railroad	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
South St	0	0	9,519	0	0.00	0.00	1.80	0.00	1.80	0.00
Family Dollar	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
Prison	26,611	0	0	0	5.04	0.00	0.00	0.00	5.04	0.00
Industrial Park	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
<b>Dist. Totals</b>	<b>78,602</b>	<b>0</b>	<b>288,677</b>	<b>0</b>	<b>14.89</b>	<b>0.00</b>	<b>54.67</b>	<b>0.00</b>	<b>69.56</b>	<b>0.00</b>

\*\* 2017 Trim Totals

## 2017 - 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)	UG (miles)				
102 SOUTH FLETCHER	NE	Hybrid	3.7	0.55	6.92	20.62	10.62	21.17	176	31,774	Yes	8	
110 PLANTATION RD	NE	Hybrid	2.99	0.36	0.41	31.8	3.40	32.16	3	140	Yes	1	
111 PLANTATION RD	NE	Hybrid	1.96	1.14	1.51	17.13	3.47	18.27	2	170	Yes	2	
209 FIFTEENTH ST	NE	Hybrid	4.81	0.2	4.21	7.05	9.03	4.25	1	93	Yes	1	
211 JASMINE STREET	NE	Hybrid	2.88	0	11.28	4.59	14.16	4.59	43	7,739	Yes	6	
212 ELEVENTH STREET	NE	Hybrid	3.29	0	10.7	1.84	13.99	1.84	118	12,239	Yes	8	
214 CLINCH DRIVE	NE	Hybrid	2.89	0	4.78	1.28	7.67	1.28	17	672	Yes	2	
310 BONNIEVIEW	NE	Hybrid	3.39	0.18	7.85	6.75	11.24	6.93	96	9,251	Yes	2	
311 BAILEY	NE	Hybrid	6.19	0	9.0	19.4	15.19	19.4	2,709	110,658	Yes	10	
9952 ALTHA	NW	Hybrid	4.6	0	46.3	0.54	50.9	0.54	213	16,558	No	14	
9882 BRISTOL	NW	Hybrid	11.52	0	42.5	1.12	54.02	1.12	181	10,095	No	15	
9982 COLLEGE	NW	Hybrid	13.44	0	40.43	6.91	53.87	6.91	1,056	58,415	Yes	41	
9866 COTTONDALE	NW	Hybrid	11.72	0	68.09	1.84	79.81	1.84	858	57,375	No	34	
9722 DOGWOOD HT	NW	Hybrid	4.26	0	11.04	0.55	15.3	0.55	159	12,030	Yes	12	
9782 FAMILY DOLLAR	NW	Hybrid	3.08	0.07	0.69	0.53	3.77	0.6	5	312	Yes	1	
9742 GREENWOOD	NW	Hybrid	10.59	0	50.13	1.4	60.72	1.4	247	16,849	No	28	
9872 HOSPITAL	NW	Hybrid	2.58	0	37.27	0.47	39.85	0.47	290	28,142	Yes	15	
9942 HWY 90E	NW	Hybrid	11.26	0	51.19	4.39	62.45	4.39	755	56,504	No	31	
9992 HWY 90W	NW	Hybrid	4.44	0.11	11.42	0.34	15.86	0.45	510	28,365	Yes	12	
9932 INDIAN SPR	NW	Hybrid	5.7	0.03	26.5	7.83	32.2	7.86	2,510	231,499	No	46	
9512 RAILROAD	NW	Hybrid	6.45	0	9.9	1.55	16.35	1.55	724	81,605	Yes	6	
9854 SOUTH ST	NW	Hybrid	7.19	0	100.05	4.22	107.24	4.22	5,080	254,824	Yes	59	
<b>TOTALS</b>			<b>128.93</b>	<b>2.64</b>	<b>552.17</b>	<b>142.15</b>	<b>681.11</b>	<b>141.79</b>	<b>15,753</b>	<b>1,025,310</b>		<b>354</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 soon. Joint use agreement negotiations are ongoing, and in varying stages of completion with CenturyLink and Comcast. All agreements should be in place and executed during 2018.

FPUC completed the joint use pole attachment audit during the last quarter of 2016. The next joint use audit should take place in 2021. The current pole count for each joint user is as follows:

<b>Joint Use Attacher</b>	<b># of Poles Attached to FPU</b>	<b># of Poles FPU Attached</b>
<b>AT&amp;T</b>	<b>3,139</b>	<b>496</b>
<b>BrightHouse</b>	<b>952</b>	<b>0</b>
<b>Century Link</b>	<b>2,347</b>	<b>5</b>
<b>Comcast NE</b>	<b>3,565</b>	<b>0</b>
<b>Comcast NW</b>	<b>8,988</b>	<b>0</b>
<b>Crown Castle</b>	<b>47</b>	<b>0</b>
<b>Fairpoint</b>	<b>255</b>	<b>12</b>
<b>Southern Light</b>	<b>363</b>	<b>0</b>

### 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

\*\*\* Latest 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 *	4	4	<u>NA</u>	<u>NA</u>	4	<u>NA</u>
(C) Completed transmission tower structure inspections. *	4	4	<u>NA</u>	<u>NA</u>	4	<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>

\* Latest 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>	308	<u>\$16,665</u>
(B) Number of transmission poles strength	<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	<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 will be completed in 2018. Next Year Budget reflects inspection cost allocated over 6 year cycle.



## 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.

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.	4	0	\$0	\$0	5	\$250,000
(B) Transmission structures hardening completed.	0	0	0	0	0	0
(C) Percent transmission structures hardening completed.	0	0	0	0	0	0

## **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.

During 2018 FPUC successfully implemented an OMS enhancement which enabled customers to leave a voice message containing further information that is beneficial for managing outages.

## **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 internal resources, consultants 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, cross arms, 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 Consultants 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 2017 there were no projects converting OH to UG on FPUC's system.

### 2017 - 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	1105	90.98	85.25	3,951,563	46,355	100,530	136.03	1.60
UG	41	156.75	59.20	80,807	1,365	6,427	2.78	0.05
<b>Total</b>	<b>1146</b>	<b>93.33</b>	<b>84.50</b>	<b>4,032,370</b>	<b>47,720</b>	<b>106,957</b>	<b>138.81</b>	<b>1.64</b>

Total # of Customers at end of 2017 ==>

29,050

**2017 - OH Reliability by Feeder - FPUC NE (Adjusted)**

FEEDER	Outage Events (N)	Ave. Duration (L Bar)	CAIDI	Customer Interrupted (CMI)	Customer Interruptions (CI)	Outage Duration (L)	SAIDI	SAIFI
SOUTH FLETCHER (102)	31	127.39	139.06	104,987	755	3,949		
PLANTATION ROADSIDE (110)	6	65.23	117.85	42,308	359	391		
PLANTATION FIELDSIDE (111)	13	76.61	68.87	2,892	42	996		
FIFTEENTH STREET (209)	14	86.76	131.59	156,192	1,187	1,215		
210 (210)	12	97.54	143.26	115,323	805	1,170		
JASMINE STREET (211)	58	99.33	92.80	680,964	7,338	5,761		
212 (212)	21	97.61	106.91	28,117	263	2,050		
CLINCH DRIVE (214)	20	62.44	57.04	18,423	323	1,249		
BONNIEVIEW (310)	16	78.07	95.15	142,153	1,494	1,249		
BAILEY (311)	36	95.39	48.25	146,162	3,029	3,434		
SADLER NECTARINE SO.14TH (215)	4	66.25	63.69	6,369	100	265		
<b>TOTAL</b>	<b>231</b>	<b>94.07</b>	<b>92.00</b>	<b>1,443,891</b>	<b>15,695</b>	<b>21,729</b>	<b>88.66</b>	<b>0.96</b>

**Total # of NE Customers in 2017:**

**16,286**

2017 - 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)	6	322.80	268.83	2,957	11	1,937			
PLANTATION ROADSIDE (110)	2	297.79	297.79	596	2	596			
PLANTATION FIELDSIDE (111)	4	86.80	83.66	6,191	74	347			
FIFTEENTH STREET (209)	3	175.72	189.86	949	5	527			
JASMINE STREET (211)	4	88.74	81.20	487	6	355			
212 (212)	1	17.08	17.08	17	1	17			
BONNIEVIEW (310)	3	109.38	109.38	328	3	328			
BAILEY (311)	5	105.74	64.93	12,338	190	529			
312 (312)	3	46.98	47.01	44,848	954	141			
<b>TOTAL</b>	<b>31</b>	<b>154.08</b>	<b>55.14</b>	<b>68,710</b>	<b>1,246</b>	<b>4,777</b>	<b>4.22</b>	<b>0.08</b>	

**Total # of NE Customers in 2017:**

**16,286**



2017 - 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)	35	101.83	186.14	471,856	2,535	3,564			
BLOUNTSTOWN (9972)	7	63.32	57.14	5,543	97	443			
BRISTOL (9882)	53	52.88	44.89	29,403	655	2,803			
COLLEGE (9982)	98	107.56	76.12	148,672	1,953	10,541			
COTTONDALE (9866)	108	79.92	78.33	173,414	2,214	8,631			
DOGWOOD HEIGHTS (9722)	32	77.49	69.30	32,430	468	2,480			
FAMILY DOLLAR (9782)	1	62.42	62.42	312	5	62			
GREENWOOD (9742)	79	94.20	57.88	177,114	3,060	7,442			
HOSPITAL (9872)	43	105.70	68.82	132,828	1,930	4,545			
HWY 90E (9942)	81	117.46	103.47	140,092	1,354	9,514			
HWY 90W (9992)	26	69.53	66.96	42,254	631	1,808			
INDIAN SPRINGS (9932)	92	89.58	88.81	340,135	3,830	8,241			
PRISON (9732)	3	61.49	63.98	256	4	184			
RAILROAD (9512)	22	89.16	104.37	99,878	957	1,962			
SOUTH STREET (9854)	131	78.95	56.13	537,457	9,576	10,342			
<b>TOTAL</b>	<b>811</b>	<b>89.47</b>	<b>79.66</b>	<b>2,331,644</b>	<b>29,269</b>	<b>72,562</b>	<b>182.67</b>	<b>2.29</b>	

Total # of NW Customers in 2017:

12,764

**2017 - 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
COLLEGE (9982)	1	82.27	82.27	658	8	82		
COTTONDALE (9866)	1	142.02	142.02	142	1	142		
GREENWOOD (9742)	1	129.20	129.20	129	1	129		
HWY 90W (9992)	1	90.10	90.10	2,703	30	90		
INDIAN SPRINGS (9932)	2	150.62	240.76	5,056	21	301		
SOUTH STREET (9854)	1	23.33	23.33	1,190	51	23		
<b>TOTAL</b>	<b>7</b>	<b>109.74</b>	<b>88.20</b>	<b>9,878</b>	<b>112</b>	<b>768</b>	<b>0.77</b>	<b>0.01</b>

**Total # of NW Customers in 2017:**

**12,764**

## **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 2018 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

Final Report dated February 2018

## **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 2017.

## **II. Steering Committee Workshop**

On December 5, the Steering Committee organized a web-based workshop for over 40 participants from the Project Sponsors hosted by the University of Florida. The workshop was held to orient new members on the model of the costs and benefits of storm hardening strategies and to discuss the integration of data from recent storm activities.

The presenter for the workshop was Ted Kury. He first described the model and the overall flow of the simulation element. He then described the 115 different inputs to the model and demonstrated where to find them. Next, he demonstrated a test run of 50 hurricane years for the state and demonstrated how the model illustrates the shift in the probability distribution of the outcome variables. Finally, he demonstrated the model's ability to simulate single hurricanes, both historical and hypothetical.

Following the demonstration, the members discussed strategies for adding data from recent storm experiences to the model.

## **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.

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, it was renewed in April 2017 and will renew automatically annually on the effective date for an additional one year period, unless terminated by the parties to the agreement.

#### **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. PURC researchers also engaged with the popular media in preparation for, and in the wake of, Hurricane Irma.

#### **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 utilizes 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.

2017 Emergency Procedures for both divisions along with any changes are as listed below.

## **NORTHEAST DIVISION CHANGES**

### **2. STORM MODE ORGANIZATIONAL CHART**

**Removed:**

Organization chart employee names

Misc. changes to the organizational chart and numerous employee title changes. These changes are reflected throughout the 2017 Emergency Procedures.

### **7. INITIATE STORM MODE PLAN**

**Changed:** J. JEA to FPL

Telephone contacts lists updated

## **NORTHWEST DIVISION CHANGES**

### **1. ORGANIZATION**

Misc. changes to the organizational chart and numerous employee title changes. These changes are reflected throughout the 2017 Emergency Procedures.



**FLORIDA PUBLIC**  
**UTILITIES**



**FLORIDA PUBLIC UTILITIES**  
**COMPANY**

**NORTHEAST FLORIDA DIVISION**

**2018**

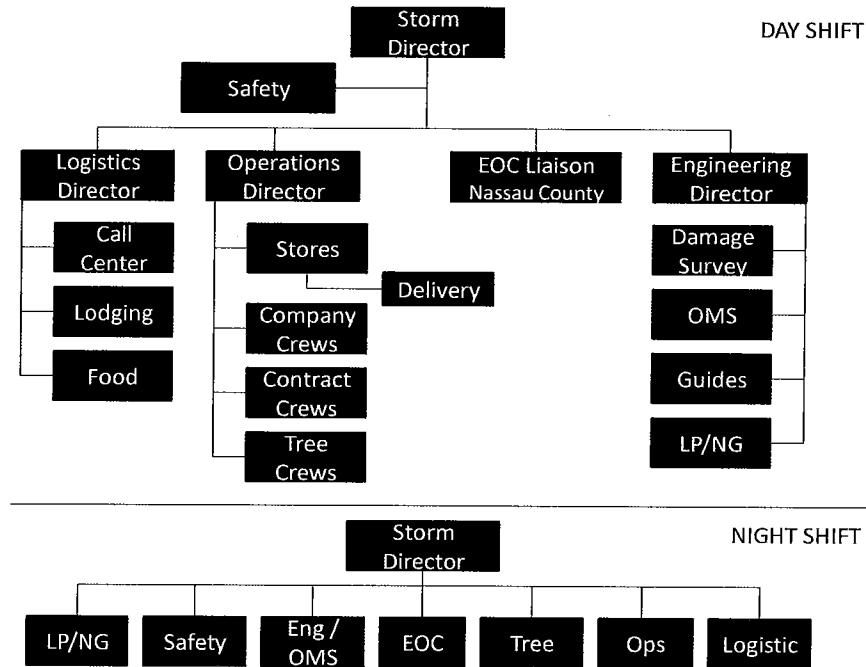
**EMERGENCY PROCEDURES**  
**NATURAL DISASTER & RECOVERY**

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**



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. If 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. Management 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. The responding Company's 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.

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 Manager. 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

Storm Director

- 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**

- 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.

### **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**

- 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 FPL 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**

- 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

- 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**

- 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

- a. Verify Transmission Service
- b. Asses Equipment Damage
- c. Identify Feeder Lockouts

### 2) Transmission Line Patrols

- a. FPL/JEA switch yards 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. Secondary's
- 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 your name is, 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 your name is, 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 Upper Management, 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 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**

<u>DAY SHIFT</u> Begin at 6:00 AM		<u>NIGHT SHIFT</u> Begin at 6:00 PM	
<b><u>OFFICE</u></b>		<b><u>OFFICE</u></b>	
Buddy Shelley	Electric Operations Mgr.	Patti Thornton	Customer Care Supervisor
Curtis Boatright	Engineering	Mia Goins	Telephone
Mark Cutshaw	Dir. Bus. Dev. & Generation	Leslie Zambrano	Telephone
Roger LaCharite	Customer Service Manager	Lynn McNeill	Logistics
Greg Blazina	Dir. Propane Operations	Shane Magnus	Engineering
Mary Atkins	Engineering	Jorge Puentes	Engineering Manager
Jarvis Hunter	Engineering	<b><u>SERVICE CREWS</u></b>	
David Richardson	EOC Rep	Shannon Wagner	Crew Leader
Linda Winston	Logistics	Stevie Mitchell Jr.	Apprentice
Linda Gamble	Telephone	<b><u>OFFICE/DAMAGE ASSESSOR/GUIDE</u></b>	
Renee Bolyard	Telephone		
Rena Knight	Telephone		
Joanie Maxwell	Telephone	Jevon Brown	Telephone/Damage Assessor
<b><u>LINE CREWS</u></b>		<b><u>PROPANE OPERATIONS</u></b>	
Chris Hebert	Assistant Elect Ops Mgr.	Allyson Singletary	Propane Clerk
Billy Clardy	Crew Leader	Thomas Stanley	Gas Utility Worker
Donnie Maxwell	Senior Lineman	<b><u>NATURAL GAS OPERATIONS</u></b>	
Randy Drake	Lineman	George Speerin	Gas Supervisor
TBD	Lineman	Rod Calhoun	Gas Service Tech
<b><u>SERVICE CREWS</u></b>			
Al Harris	Senior Lineman	<b><u>DAY SHIFT (CONTINUED)</u></b>	
Dean Montgomery	Lineman	Begin at 6:00 AM	
TBD	Lineman	<b><u>Natural Gas Operations</u></b>	
Justin Beverly	IMC Tech	Cedric Mitchell	Service Tech
TBD	IMC Tech		

<b>STORES</b>		<b>PROPANE OPERATIONS</b>	
Donna Fowler (FR)	Stores Supervisor	Dave Pluta	Propane Supervisor
Randy Moore (FR)	Warehouse Assistant	James Moore	Propane Operator II
	-	Jody Montgomery	Gas Utility Worker
		Susan Beale	Senior Propane Clerk
<b>DAMAGE ASSESSORS/GUIDE</b>		<b>SAFETY</b>	
Lewis Peacock	Damage Assessor/Guide	Kevin Metts	Safety, Training & Compliance
Sarah Davis	Damage Assessor/Guide		
Jeff Berger	Damage Assessor/Guide		

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
FPU-Marianna	Clint Brown	(904)572-2126 cell	Crews, Tree Crews, Support
ATT	Marvin Fisher Scott Miller	(904) 727-1544 (904) 403-1894 (904) 407-2569 (904) 238-8263 cell	Engineering 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.co	(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 Coordination 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.	(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
FPL	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  Onsite Emergency	1-800-437-4474 321-274-8578 888-218-0298 678-566-2439	780 Amelia Island Pkwy
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	Electric Line	
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	Electric Line	

795	K413CK	2006	Trail Blazer	SUV	CS411	Customer Service	
796	T004DR	2006	Silverado	Pickup	EL451	On-Call	
798	GA4363	2005	7400	Digger Derrick	EL452	Electric Line	
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	
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	NE 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	
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	Justin Beverly	
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	Kevin Metts	
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 Home 321-3478	1900 Amelia Trace Ct.	321-0898 Cell 206-2774	Renee Stoffel
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		(305) 442-5739	Dispatch 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
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**C. Jacksonville Electric Authority**

Dispatcher	800-683-5542	
	(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
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**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

- M. **Florida Power & Light**  
Northern Area Dispatch 305-442-5739

**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)

**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**

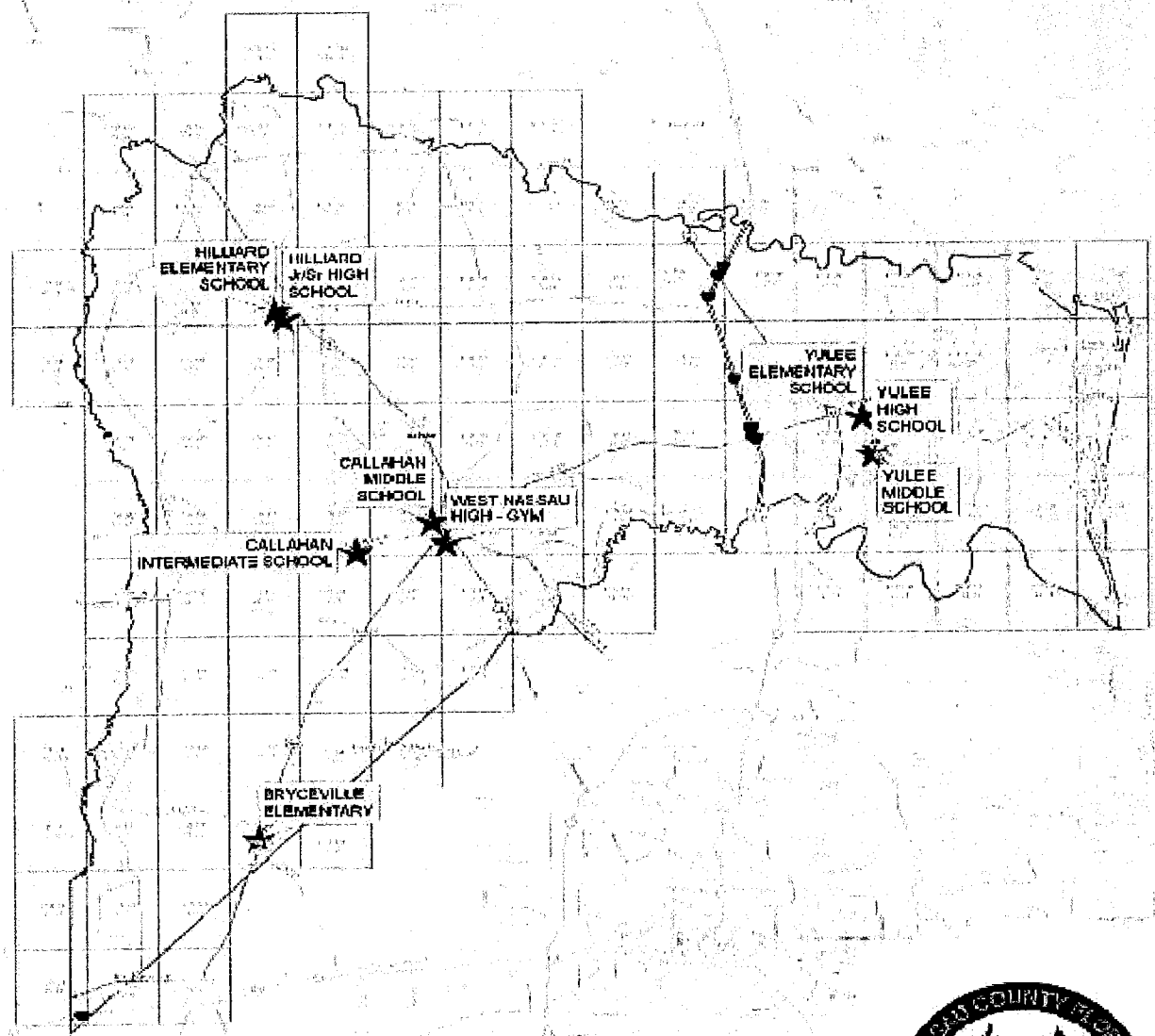
FPUC will employ contractors to perform both the post-storm data collection and forensics analysis should a significant storm occur. The contractors will be provided with system mapping information and requested to collect post-storm damage information on areas as defined by the company. The areas will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

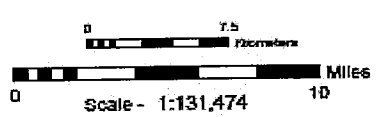
Data collected during the collection process will be analyzed after completion of all storm related work has been completed. This analysis will summarize the type damage and failure modes of outages in order to determine methods to improve reliability in the future.



# Nassau County Florida Schools Statewide Emergency Shelter Plan

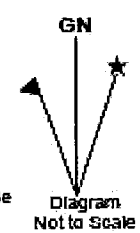


★ Nassau County Schools



US National Grid  
100,000-m Square ID  
LQIMQ  
LPIMP  
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 Convergency  
1° 16' 46"  
To Convert a  
Grid Azimuth  
to a Magnetic Azimuth  
ADD G-M Angle

**FLORIDA PUBLIC UTILITIES  
COMPANY**



**NORTHWEST FLORIDA  
DIVISION**

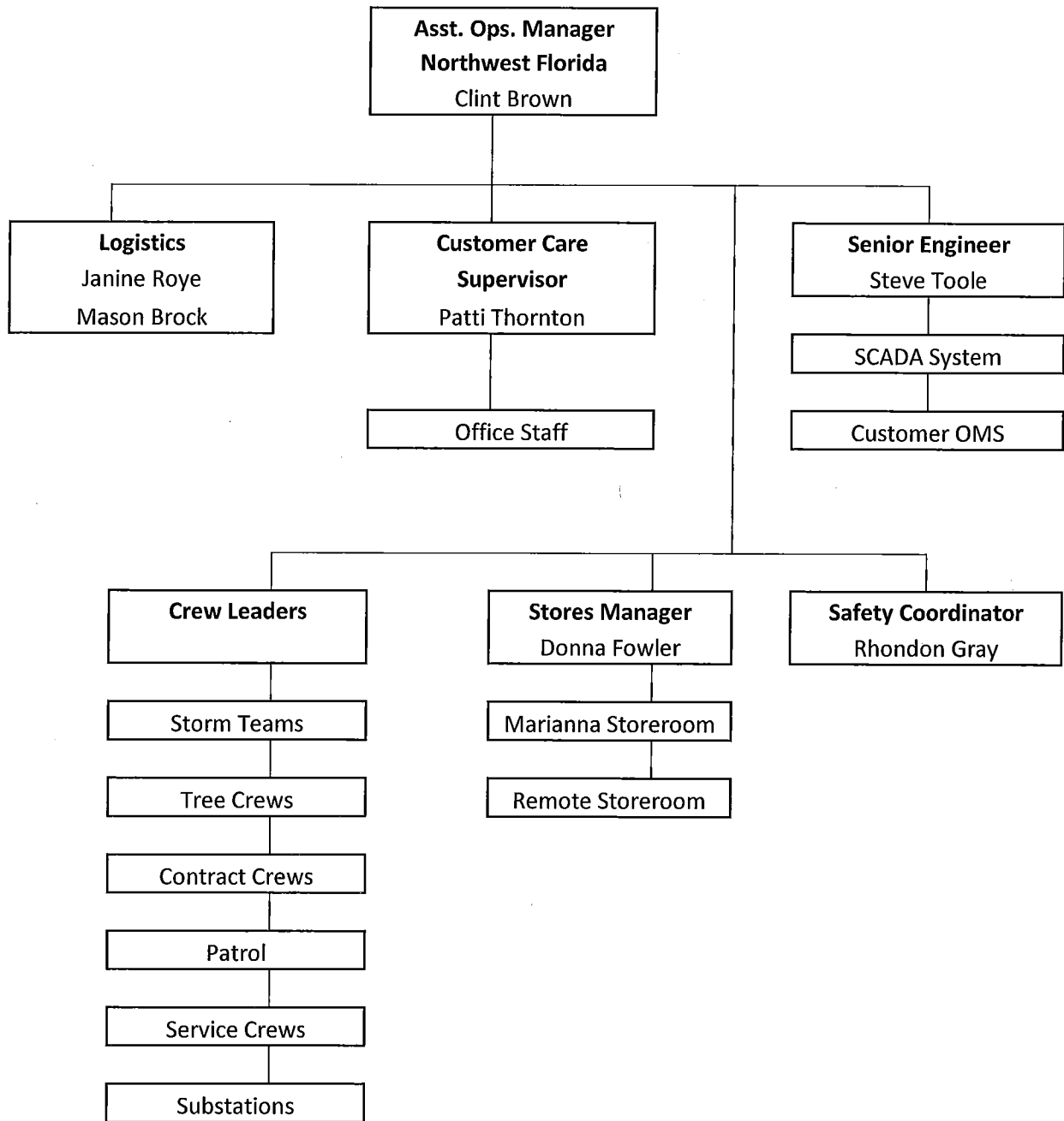
**2018  
EMERGENCY PROCEDURES**

## 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**

**Assistant. 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. Update status of vehicle repair facilities

**Senior Engineer**

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

#### Logistics

- A. Update phone list for employees, law enforcement, emergency management, city/towns, utilities, contractors, tree trimming, personnel, etc.
- B. Review emergency telephone arrangements and make additional preliminary arrangements.
- C. Update status of thirty (30) motel rooms necessary for emergency/contract crews.
- D. Locate sources of food/water for crews and office personnel. Identify local and out of town caterers.
- E. Update status of building security firm.
- F. Ensure storm shutters, laundry facilities and cooking facilities are available
- 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) Twenty (20) flashlights with batteries.

#### Crew Leaders

- A. Review status of all transportation equipment and have repairs made
- B. Verify all vehicles kept filled with fuel
- C. Assist with annual refresher training

#### Warehouse

- A. Check material quantities and emergency stock prior to June 1. Begin necessary purchasing of emergency stock approved for purchase prior to an emergency.
- B. Have necessary emergency material delivered prior to June 1.

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

#### Director Electric Operations

- A. Monitor the emergency.
- B. Begin making preparations for obtaining emergency assistance from other utilities and contractors.
- C. Handle all media request.
- D. Inform all employees as to assignments and emergency information.
- E. Consult with FPUC Upper Management concerning activation of Division Emergency Procedures.
- F. 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.
- G. 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.
- L. Check the status of personnel on vacation.

**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.

**Safety**

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

**8. DURING THE EMERGENCY**

**Director Electric Operations**

- 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 OMS activities.
- 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 Assistant Operations Manager and begin making final logistical arrangements for outside crews.

**Assistant. Operations Manager**

- A. Be located at the Northwest Florida office
- B. Work with Senior Engineer to determine restoration requirements.
- C. Coordinate and manage all restoration efforts
- D. Keep all employees informed of when to report to work

**Safety**

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

**9. AFTER THE EMERGENCY**

**Director Electric Operations**

- A. Determine manpower requirement from information provided by others. Contact Upper Management 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 keep the Media informed.

**Senior Engineer**

- A. Provide damage assessment to Assistant Operations Manager.
- B. Provide updates to Assistant Operations Manager as needed concerning restoration progress.

C. Monitor manpower and equipment requirements and update Assistant Operations Manager as required.

D. Keep a list of all company and outside crews and their locations.

#### **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 is operating at office.

F. Ensure Division office supplies are in place if needed.

G. Ensure caterers are available as needed.

#### **Assistant Operations Manager**

A. Determine and assign appropriate manpower and equipment for each outage situation.

B. Work with 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.

F. Initiate damage assessment teams.

G. Prioritize and schedule the restoration process.

H. Make assignments and dispatch crews as necessary in order to ensure orderly and efficient restoration.

### **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 Assistant Operations Manager will review these instructions with 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) Telephone communication procedures with appropriate list of 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 Assistant Operations manager 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 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 working all restoration activities will cease. The Assistant Operations Manager 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. Secondary's
- 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 Assistant 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 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 Assistant Operations 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 Assistant Operations Manager, 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 Assistant Operations Manager 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.

Director, Electric Operations  
Assistant Operations Manager

Senior Engineer  
Assistant 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>
Clint Brown      Asst. Operations Manager, NW	Donna Fowler      Stores Manager
Steve Toole      Senior Engineer	Morgan 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>	
Bradley Flowers      Lineman	<b><u>PATROLMAN/GUIDE</u></b>
James Ussery      Crew Leader	Janet Register      Patrol/Guide
Alvin Foran      Crew Leader	
Kevin Harris      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**

Gulf Power Company	Andy McQuagge	(850) 872-3220	Crews
West Florida Electric Coop	Bill Rimes	(850) 263-6518	Crews
FPU-Fernandina Beach	Chris Hebert	(904) 277-3444	Crews
Davey Tree	Russell Brooks	(352) 279-8622	Tree Crews
Davey Tree	Russell Brooks	(228) 396-5810	Tree Crews
City of Tallahassee	Robert McGarrah	(850) 891-5534	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 Coordination 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	
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 <sup>3</sup> / <sub>6</sub>	30
35-3540	Pole, 35 <sup>3</sup> / <sub>5</sub>	10
35-3555	Pole, 40 <sup>3</sup> / <sub>1</sub>	30
35-3579	Pole, 45 <sup>3</sup> / <sub>1</sub>	25
35-3590	Pole, 50 <sup>3</sup> / <sub>1</sub>	10
35-3600	Pole, 55 <sup>3</sup> / <sub>1</sub>	5
35-3605	Pole, 60 <sup>3</sup> / <sub>1</sub>	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**

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								

989	Toy. Pickup (Register)								
865	Signboard								
866	Trailer								
	Ford Pickup (Toole)								
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	
Executive Inn	4113 Lafayette	526-3710	
Best-Value Inn 4168 Lafayette	482-4973		
Chipola Jr. College	3094 College Dr.	526-2761	
Cottdale 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
Cottdale 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
Cottdale 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
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  
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
Cottdale	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:**

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.

### **Director Electric Operations**

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.