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www.fpuc.com

March 1, 2016

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

Buddy & Coll

Dear Mr. Ballinger:

Attached is Florida Public Utilities Company's required 2015 Annual Update. The update includes the Annual Distribution Service Reliability Report required by Rule 25-6.0455, the Annual Wood Pole Inspection Report required by Order No. PSC-06-0144, and updates of our Storm Hardening Plan and Ten Storm Preparedness Initiatives, as required by Order No. PSC-06-0781.

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

Sincerely,

**Buddy Shelley** 

Director, Electric Operations Florida Public Utilities Company

Attachments

Cc:

Commission Clerk

Mike Cassel

Warren DiNapoli

Householder, Jeff

Martin Cheryl

Puentes, Jorge

Tanner, Lynwood

Toole, Steve

Webber, Kevin

# Florida Public Utilities Company

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

2015 Annual Update

March 1, 2016



## Florida Public Utilities Company

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

#### **Annual Update**

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#### Introduction

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

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

### I. Reliability Indices

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

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

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

Indices are calculated as follows:

SAIDI = System Average Interruption Duration Index	$= \frac{\text{Total Customer Minutes of Interruption (CMI)}}{\text{Total Number of Customers Served (C)}}$
CAIDI = Customer Average Interruption Duration Index	= Total Customer Minutes of Interruption (CMI) Total Number of Customer Interruptions (CI)
SAIFI = System Average Interruption Frequency Index	= Total Number of Customer Interruptions (CI) Total Number of Customers Served (C)
L-Bar = Average Duration of Outage Events	= Sum of All Outage Event Durations (L) Total Number of Outage Events (N)

<sup>\*</sup> 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 <u>all</u> 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.
- 1. "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

CAUSES OF OUTAGE EVENTS – ACTUAL									
Utility Name: Florida Public	Utilities Company-	NE Division	Year: <u>2015</u>						
Cause (a)	Number of Outage Events(N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)						
Defective Equipment	63	104.39	115.81						
Lightning	59	109.26	100.84						
Vegetation	51	68.96	68.30						
Animal	28	46.47	52.88						
Unknown	19	81.11	99.26						
Other	11	81.92	82.59						
Transmission	9	158.36	77.25						
Vehicle	7	145.67	191.95						
Substation	6	55.24	55.24						
Planned Outage	5	82.93	51.37						
Other Weather	2	91.41	114.11						
System Totals NE	260	90.99	78.36						

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

CAUSES	CAUSES OF OUTAGE EVENTS – ADJUSTED									
Utility Name: Florida Public Utilities Company- NE Division Year: 2015										
Cause (a)	Number of Outage Events(N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)							
Defective Equipment	63	104.39	115.81							
Lightning	59	109.26	100.84							
Vegetation	51	68.96	68.30							
Animal	28	46.47	52.88							
Unknown	19	81.11	99.26							
Other	11	81.92	82.59							
Vehicle	7	145.67	191.95							
Other Weather	2	91.41	114.11							
System Totals NE	240	89.52	88.46							

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

CAUSES OF OUTAGE EVENTS – ACTUAL								
Utility Name: Florida Public	Utilities Company-	NW Division	Year: <u>2015</u>					
Cause (a)	Number of Outage Events(N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)					
Vegetation	244	77.51	63.63					
Other Weather	176	94.09	81.82					
Animal	173	54.27	54.46					
Lightning	89	78.02	78.63					
Defective Equipment	73	89.97	70.61					
Unknown	56	58.85	46.17					
Planned Outage	23	57.14	59.48					
Vehicle	18	124.34	129.49					
Other	16	101.60	137.85					
Substation	4	84.06	92.17					
Tornado	1	116.00	116.00					
System Totals NW	873	77.09	82.42					

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

CAUSES OF OUTAGE EVENTS – ADJUSTED								
Utility Name: Florida Public Utilities Company - NW Division Year: 2015								
Cause (a)	Number of Outage Events(N) (b)	Average Restoration Time (CAIDI) (d)						
Vegetation	244	77.51	63.63					
Other Weather	176	94.09	81.82					
Animal	173	54.27	54.46					
Lightning	89	78.02	78.63					
Defective Equipment	73	89.97	70.61					
Unknown	56	58.85	46.17					
Vehicle	18	124.34	129.49					
Other	16	85.97	53.36					
System Totals: NW	844	77.25	72.14					

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

CAUSE	CAUSES OF OUTAGE EVENTS – ACTUAL									
Utility Name: Florida Public	Utilities Company-	FPUC Total	Year: <u>2015</u>							
Cause (a)	Number of Outage Events(N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)							
Vegetation	295	76.03	65.69							
Animal	201	53.18	53.91							
Other Weather	178	94.06	81.84							
Lightning	148	90.47	96.12							
Defective Equipment	136	96.65	87.47							
Unknown	75	64.49	77.54							
Planned Outage	28	61.74	52.10							
Other	27	93.58	135.97							
Vehicle	25	130.31	131.78							
Substation	10	66.77	92.09							
Transmission	9	158.36	77.25							
Tornado	1	116.00	116.00							
System Totals FPUC	1133	80.28	79.71							

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**

CAUSES	CAUSES OF OUTAGE EVENTS – ADJUSTED									
Utility Name: Florida Public	Utility Name: Florida Public Utilities Company- FPUC Total Year: 2015									
Cause (a)	Number Average of Outage Duration Events(N) (L-Bar) (b)									
Vegetation	295	76.03	65.69							
Animal	201	53.18	53.91							
Other Weather	178	94.06	81.84							
Lightning	148	90.47	96.12							
Defective Equipment	136	96.65	87.47							
Unknown	75	64.49	77.54							
Other	27	93.58	135.97							
Vehicle	25	130.31	131.78							
System Totals FPUC	1084	79.96	78.81							

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

#### **PART II**

	THREE PERCENT FEEDER LIST – ACTUAL												
Utility N	Utility Name: Florida Public Utilities Company Year: 2015											<u>2015</u>	
				Number o	of Customers	S	1	I					
Primary Circuit Id. No. or Name (a)	Sub- station Origin (b)	Location (c)	Residential (d)	Commercial (e)	Industrial (f)	Other (g)	Total (h)	Outage Events "N" (i)	Avg Duration "L-Bar" (j)	CAIDI (k)	Listed Last Year? (I)	No. of Years in the Last 5 (m)	Corrective Action Completion Date (n)
311	Stepdown	Northeast	2326	97	0		2423	2	100.52	100.53	NO	NO	N/A
9882	B-town	Northwest	854	187	0	0	1041	3	170.62	170.70	NO	NO	N/A

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

#### **PART II**

	THREE PERCENT FEEDER LIST – ADJUSTED												
Utility N	Utility Name: Florida Public Utilities Company Year: 2015											<u>2015</u>	
				Number o	of Customers	3							
Primary Circuit Id. No. or Name (a)	Sub- station Origin (b)	Location (c)	Residential (d)	Commercial (e)	Industrial (f)	Other (g)	Total (h)	Outage Events "N" (i)	Avg Duration "L-Bar" (j)	CAIDI (k)	Listed Last Year? (I)	No. of Years in the Last 5 (m)	Corrective Action Completion Date (n)
311	Stepdown	Northeast	2326	97	0	0	2423	2	100.52	100.53	NO	NO	N/A
9882	B-town	Northwest	854	187	0	0	1041	1	69.25	69.25	NO	NO	N/A

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

#### PART III

	SYSTEM RELIABILITY INDICES – ACTUAL									
Utility Name: Florida Public Utilities Company Year: 2015										
District or Service Area (a)	SAIDI (b)	CAIDI (c)	SAIFI (d)	MAIFIe (e)	CEMI5 (f)					
NE Division	314.59	78.36	4.01	N/A*	N/A*					
NW Division	205.52	82.42	2.49	N/A*	N/A*					
System Averages	266.07	79.71	3.34	N/A*	N/A*					

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

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

#### **PART III**

<u>S</u>	SYSTEM RELIABILITY INDICES – ADJUSTED									
Utility Name: Florida Public Utilities Company Year: 2015										
District or Service Area (a)	SAIDI (b)	CAIDI (c)	SAIFI (d)	MAIFIe (e)	CEMI5 (f)					
NE Division	105.21	88.46	1.19	N/A*	N/A*					
NW Division	155.02	72.14	2.15	N/A*	N/A*					
System Averages	127.37	78.81	1.62	N/A*	N/A*					

<sup>\*</sup> 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

# 2015 - 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 Interruption s (CI)	Total Outage Duration (L)	SAIDI	SAIFI
102 South Fletcher	37	79.82	77.44	475998	6147	2953		
110 Plantation Roadside	5	90.73	97.88	136347	1393	454		
111 Plantation Fieldside	10	125.49	99.35	155884	1569	1255		
209 Fifteenth Street	19	78.68	185.85	55570	299	1495		
210 Buss Tie	17	75.46	72.63	15907	219	1283		
211 Jasmine Street	39	99.52	83.03	241200	2905	3881		
212 Eleventh Street	38	95.02	88.03	113642	1291	3611		
214 Clinch Drive	25	74.44	60.89	57910	951	1861		
215 Sadler, Nectarine, So.14th	11	119.13	78.06	82741	1060	1310		
310 Bonnieview	19	65.04	85.49	86941	1017	1236		
311 Bailey	27	101.73	94.90	523163	5513	2747		
Step Down	2	78.30	78.24	2372932	30329	157		
AIP	2	60.63	60.60	646920	10676	121		
Chip Mill	9	143.67	143.67	1293	9	1293		
Totals	260	90.99	78.36	4,966,514	63379	23724	314.59	4.01

Total No. of Customers at end of 2015==>

# 2015 - Reliability Indicators By Feeder FPUC - NE (Adjusted)

Cause	Number of Outage Events (N)	Average Duration (L-Bar)	CAIDI	Sum of all Customer Min. Interrupted (CMI)	Total Customer Interruptions (CI)	Total Outage Duration (L)	SAIDI	SAIFI
102 South Fletcher	36	81.30	77.75	474994	6109	2927		
110 Plantation Roadside	5	90.73	97.88	136347	1393	454		
111 Plantation Fieldside	10	125.49	99.35	155884	1569	1255		
209 Fifteenth Street	18	80.81	186.34	55529	298	1455		
210 Buss Tie	17	75.46	72.63	15907	219	1283		
211 Jasmine Street	38	99.98	84.11	95634	1137	3799		
212 Eleventh Street	36	97.16	100.73	46840	465	3498		
214 Clinch Drive	25	74.44	60.89	57910	951	1861		
215 Sadler, Nectarine, So.14th	10	123.65	114.43	12129	106	1236		
310 Bonnieview	19	65.04	85.49	86941	1017	1236		
311 Bailey	26	95.48	94.87	522899	5512	2482		
Totals	240	89.52	88.46	1,661,015	18776	22792	105.21	1.19

Total No. of Customers at end of 2015 ==>

# 2015 - Reliability Indicators By Feeder FPUC - NW (Actual)

Cause	Number of Outage Events (N)	Average Duration (L-Bar)	CAIDI	Sum of all Customer Min. Interrupted (CMI)	Total Customer Interruptions (CI)	Total Outage Duration (L)	SAIDI	SAIFI
9952 Altha	60	75.64	77.37	164797	2130	4539		
9972 Blountstown	20	74.38	65.67	40718	620	1488		
9882 Bristol	49	72.70	139.56	647158	4637	3562		
9982 College	128	81.42	90.53	421575	4657	10422		
9866 Cottondale	98	68.90	49.65	185575	3738	6752		
9722 Dogwood Hts.	23	89.93	82.05	13539	165	2068		
9782 Family Dollar	6	85.72	92.62	1389	15	514		
9742 Greenwood	102	84.29	73.68	188910	2564	8598		
9872 Hospital	43	65.44	58.12	119669	2059	2814		
9942 Hwy 90 E	81	82.46	67.11	132604	1976	6679		
9992 Hwy 90 W	44	88.07	84.54	44892	531	3875		
9832 Indian Springs	61	78.05	82.51	243986	2957	4761		
9752 Industrial Park	2	88.92	111.88	448	4	178		
9732 Prison	8	75.45	78.36	1410	18	604		
9512 Railroad	18	64.39	36.81	12737	346	1159		
9854 South Street	129	71.24	70.02	298336	4261	9190		
Altha Sub	1	95.03	95.03	81824	861	95		
Totals	873	77.09	82.42	2,599,568	31,539	67,298	205.52	2.49

Total No. of Customers at end of 2015==>

# 2015 - Reliability Indicators By Feeder FPUC - NW (Adjusted)

Cause	Number of Outage Events (N)	Average Duration (L-Bar)	CAIDI	Sum of all Customer Min. Interrupted (CMI)	Total Customer Interruptions (CI)	Total Outage Duration (L)	SAIDI	SAIFI
9952 Altha	54	77.88	77.26	99670	1290	4206		
9972 Blountstown	19	75.18	68.86	28853	419	1429		
9882 Bristol	46	65.29	72.48	182785	2522	3004		
9982 College	122	82.66	91.96	412899	4490	10085		
9866 Cottondale	92	69.34	49.73	181874	3657	6379		
9722 Dogwood Hts.	23	89.93	82.05	13539	165	2068		
9782 Family Dollar	6	85.72	92.62	1389	15	514		
9742 Greenwood	101	83.79	73.65	188775	2563	8463		
9872 Hospital	43	65.44	58.12	119669	2059	2814		
9942 Hwy 90 E	80	83.29	67.79	132188	1950	6663		
9992 Hwy 90 W	44	88.07	84.54	44892	531	3875		
9832 Indian Springs	59	78.88	82.94	242677	2926	4654		
9752 Industrial Park	2	88.92	111.88	448	4	178		
9732 Prison	8	75.45	78.36	1410	18	604		
9512 Railroad	18	64.39	36.81	12737	346	1159		
9854 South Street	127	71.67	70.28	296999	4226	9101		
Totals	844	77.25	72.14	1,960,803	27181	65,195	155.02	2.15

Total No. of Customers at end of 2015==>

#### FPUC 2015 – Reliability Indicators and Analysis

FPUC's reliability has significantly improved in 2015. FPUC's reliability indicators are significantly influenced by the weather due to our relatively small territory when compared to the larger investor owned utilities within the state. FPUC's "other weather" caused the third most outages in 2015 with 178. Both NE and NW Divisions continue to invest in infrastructure improvements and upgrades which will continue to generate reliability improvements for future years. FPUC's combined (NE & NW Divisions) reliability indicators improved when compared to the five year averages. The percentage improvements are as follows: SAIDI -20%, CAIDI -15.7%, SAIFI -5.1% and L-BAR -12.9%. All combined indicators show significant improvements when compared to 2014's reliability.

FPUC will continue to monitor all the reliability indices and outage causes to adjust and improve current reliability programs.

#### <u>FPUC 2015 – Description of Excluded Events for Named Storms,</u> Transmission, Distribution, and Substations

#### **Named Storms and Tornados**

Neither the NE nor NW was impacted by any named storm during 2015. However, the NW experienced tornado caused outages on July 7, 2015.

#### **Transmission and Substation**

The NE Division was affected by two major outages on April 18 and June 19 of 2015. During these two events, all FPU's Northeast customers lost power when FPU's energy supplier (JEA) experienced severe weather conditions that tripped the 138KV incoming lines to the island. The 69KV substation and transmission outages reported herein were also related to severe weather conditions. FPU will continue to implement its long term plan of enhancing lightning protection on the 69KV system. The outages related to the Chip Mill were resolved by replacing a defective transformer in August of 2015.

The NW Division experienced five substation outages, as noted below. All five were caused by trips on Gulf Power's Transmission System that provides power to the NW Division.

The NE and NW Divisions, as noted below in the Excluded Events Tables, had several planned outages to perform maintenance to different sections of the distribution system.

	2015 NE Divis	ion Excluded Event	:s		
Date	Feeder	Exclusion	Aff Cust	L	СМІ
3/9/15	CHIP MILL	Substation	1	42	42
4/15/15	CHIP MILL	Substation	1	45	45
4/18/15	STEPDOWN	Transmission	15152	151	2294770
5/2/15	CHIP MILL	Substation	1	46	46
5/3/15	JASMINE STREET (211)	Transmission	1768	82	145565
5/3/15	212 (212)	Transmission	825	81	66770
5/3/15	SADLER (215)	Transmission	954	74	70612
5/7/15	FIFTEENTH STREET (209)	Planned Outage	1	40	40
5/9/15	BAILEY (311)	Planned Outage	1	264	264
6/6/15	AIP	Transmission	5316	70	370791
6/19/15	STEPDOWN	Transmission	15177	5	78162
6/24/15	CHIP MILL	Substation	1	69	69
7/3/15	CHIP MILL	Substation	1	94	94
8/3/15	CHIP MILL	Substation	1	36	36
8/13/15	SOUTH FLETCHER (102)	Planned Outage	38	26	1003
8/26/15	CHIP MILL	Transmission	1	52	52
9/2/15	CHIP MILL	Transmission	1	53	53
10/27/15	AIP	Planned Outage	5360	52	276129
11/8/15	CHIP MILL	Transmission	1	857	857
11/12/15	212 (212)	Planned Outage	1	32	32

	2015 NW Divi	sion Excluded Even	ts		
Date	Feeder	Exclusion	Aff Cust	L	СМІ
2/23/15	SOUTH STREET (9854)	Planned Outage	26	32	825
3/30/15	COLLEGE (9982)	Planned Outage	7	79	555
4/2/15	GREENWOOD (9742)	Planned Outage	1	135	135
4/14/15	COTTONDALE (9866)	Planned Outage	34	62	2115
4/20/15	COLLEGE (9982)	Planned Outage	7	44	308
4/22/15	COTTONDALE (9866)	Planned Outage	5	99	495
4/22/15	COTTONDALE (9866)	Planned Outage	13	20	261
4/29/15	COLLEGE (9982)	Planned Outage	1	16	16
5/4/15	INDIAN SPRINGS (9932)	Planned Outage	25	35	878
5/20/15	COLLEGE (9982)	Planned Outage	1	93	93
5/21/15	COLLEGE (9982)	Planned Outage	1	54	54
6/23/15	ALTHA (9952)	Planned Outage	7	60	423
6/30/15	ALTHA (9952)	Substation	650	76	49118
6/30/15	BLOUNTSTOWN (9972)	Substation	201	59	11866
6/30/15	BRISTOL (9882)	Substation	1040	336	349440
7/6/15	SOUTH STREET (9854)	Planned Outage	9	57	513
7/7/15	BRISTOL (9882)	Tornado	36	116	4176
7/20/15	INDIAN SPRINGS (9932)	Planned Outage	6	72	432
8/14/15	ALTHA SUB	Substation	861	95	81824
8/14/15	BRISTOL (9882)	Substation	1039	107	110757
9/3/15	COLLEGE (9982)	Planned Outage	150	51	7650
9/14/15	COTTONDALE (9866)	Planned Outage	17	32	544
9/22/15	ALTHA (9952)	Planned Outage	2	49	98
9/28/15	COTTONDALE (9866)	Planned Outage	1	147	147
9/30/15	HWY 90E (9942)	Planned Outage	26	16	416
10/14/15	ALTHA (9952)	Planned Outage	2	23	46
10/15/15	COTTONDALE (9866)	Planned Outage	11	13	139
11/16/15	ALTHA (9952)	Planned Outage	26	29	754
12/4/15	ALTHA (9952)	Planned Outage	153	96	14688

## 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. The first cycle of pole inspections was completed during 2015. In 2016 we will begin with the first year of the second cycle for both divisions.

#### **Inspection Process**

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

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

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

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

#### **Strength and Loading Assessment**

The contractor performs Strength Assessment tests on selected poles to compare the current measured circumference to the original circumference of the pole. The effective circumference of

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

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

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

The contractor provides FPUC with follow up reports.

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

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

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

#### **Summary**

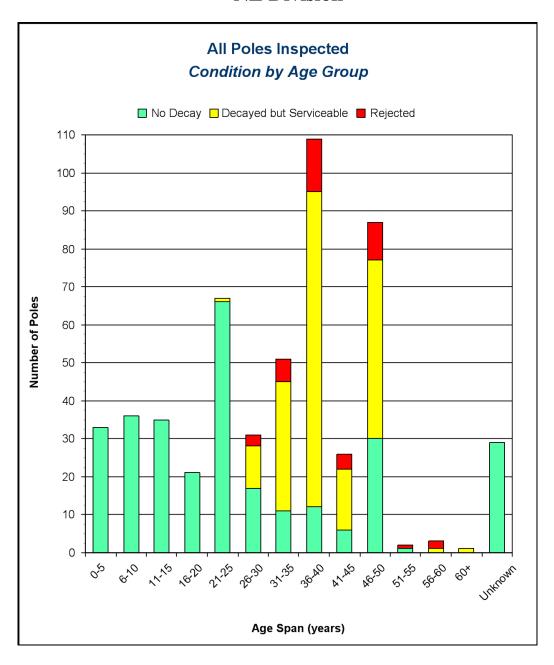
FPUC collects and stores pole inspection data upon completion of annual wood pole inspections. The contractor provides FPUC with wood pole inspection data that includes pole location, size, class, test results, and general comments. The contractor provides inspection summary data via an On-line Data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

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

### Florida Public Utilities Company - NE Division Annual Wood Pole Inspection Report Cycle Year #8of 8 Year Cycle (Inspection Year 2015)

а	b	С	d	е	f	g	h	i	j	k	I	m	n	0
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
4872	522	2	531	40	8%	33	N/A*	10	N/A*	0	13	5027	100%	626
expla If g + pro	, provide nation h < e, ovide nation		en poles left to quires special b		•	uire FDOT per	mitting, which	n is in process,	one transmis:	sion pole, whic	ch will be replac	ced in 2016 w	ith a concrete	pole and
	tional mation													

#### **NE Division**



### **NE Division**

# All Poles Inspected Condition by Age Group

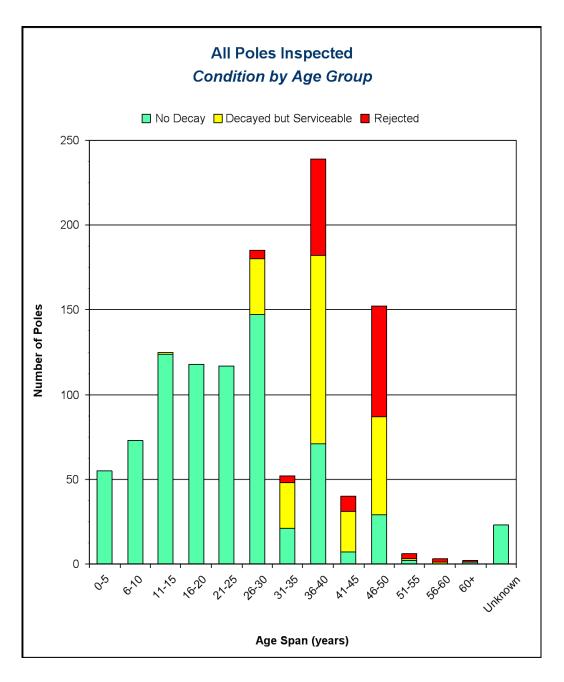
Age Span (years)	No De	ecay	Decayed but Serviceable Rejected							Total F				
	Number	%	Internal Decay	External Decay	Other	Number	%	Internal Decay	External Decay	Other	Number	%	Number	%
0-5	33	100%	0	0	0	0	0%	0	0	0	0	0%	33	6%
6-10	36	100%	0	0	0	0	0%	0	0	0	0	0%	36	7%
11-15	35	100%	0	0	0	0	0%	0	0	0	0	0%	35	7%
16-20	21	100%	0	0	0	0	0%	0	0	0	0	0%	21	4%
21-25	66	98.5%	0	1	0	1	1.5%	0	0	0	0	0%	67	13%
26-30	17	54.8%	0	11	0	11	35.5%	0	3	0	3	9.7%	31	6%
31-35	11	21.6%	0	34	0	34	66.7%	0	6	0	6	11.8%	51	10%
36-40	12	11%	0	83	0	83	76.1%	0	14	0	14	12.8%	109	21%
41-45	6	23.1%	0	16	0	16	61.5%	0	4	0	4	15.4%	26	5%
46-50	30	34.5%	0	47	0	47	54%	0	10	0	10	11.5%	87	16%
51-55	1	50%	0	0	0	0	0%	0	1	0	1	50%	2	0%
56-60	0	0%	0	1	0	1	33.3%	0	2	0	2	66.7%	3	1%
60+	0	0%	0	1	0	1	100%	0	0	0	0	0%	1	0%
Unknown	29	100%	0	0	0	0	0%	0	0	0	0	0%	29	5%
Total	297	56%	0	194	0	194	37%	0	40	0	40	8%	531*	

\* Average Age: 29.9 years

#### Florida Public Utilities Company - NW Division Annual Wood Pole Inspection Report Cycle Year #8 of 8 year Cycle (Inspection Year 2015)

а	b	С	d	е	f	g	h	i	j	k	I	m	n	0
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
21279	1187	0	1190	146	12.23%	349	N/A*	463	N/A*	183	73	21282	100%	2660
If d < b, p explan		N/A												
If g + h < e explan	-	N/A * Present FF	PUC policy is to	replace all fai	lure poles in li	eu of bracing	'restorable" fail	lure poles. The	erefore, colum	nns (h) and (j) a	are not applical	ole (N/A) to FPUC	at this time.	
Additi Inform														

### **NW Division**



### **NW Division**

# All Poles Inspected Condition by Age Group

Age Span (years)	No De	ecay	De								Total F			
	Number	%	Internal Decay	External Decay	Other	Number	%	Internal Decay	External Decay	Other	Number	%	Number	%
0-5	55	100%	0	0	0	0	0%	0	0	0	0	0%	55	5%
6-10	73	100%	0	0	0	0	0%	0	0	0	0	0%	73	6%
11-15	124	99.2%	0	1	0	1	0.8%	0	0	0	0	0%	125	11%
16-20	118	100%	0	0	0	0	0%	0	0	0	0	0%	118	10%
21-25	117	100%	0	0	0	0	0%	0	0	0	0	0%	117	10%
26-30	147	79.5%	0	33	0	33	17.8%	0	5	0	5	2.7%	185	16%
31-35	21	40.4%	0	27	0	27	51.9%	0	4	0	4	7.7%	52	4%
36-40	71	29.7%	0	111	0	111	46.4%	0	57	0	57	23.8%	239	20%
41-45	7	17.5%	0	24	0	24	60%	0	9	0	9	22.5%	40	3%
46-50	29	19.1%	0	58	0	58	38.2%	0	65	0	65	42.8%	152	13%
51-55	2	33.3%	0	1	0	1	16.7%	0	3	0	3	50%	6	1%
56-60	0	0%	0	1	0	1	33.3%	0	2	0	2	66.7%	3	0%
60+	1	50%	0	0	0	0	0%	0	1	0	1	50%	2	0%
Unknown	23	100%	0	0	0	0	0%	0	0	0	0	0%	23	2%
Total	788	66%	0	256	0	256	22%	0	146	0	146	12%	1190*	

<sup>\*</sup> Average Age: 28 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 were 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 the homes.

#### **Deployment Strategy:**

FPUC has a fully implemented storm hardening strategy. Significant areas of note for 2015 include:

- During 2015, each division completed the eighth year of pole inspections for the 8 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 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.

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

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

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

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

Both the NE and NW Divisions have continued to replace reject poles. Many of these reject poles have joint use attachments. New replacement poles were designed to accommodate joint use facilities and were installed in accordance with criteria found in the current addition of NESC guidelines for extreme wind loading conditions. The new installations were coordinated with joint users. 33 reject poles were replaced in the NE Division and 349 reject poles were replaced in the NW Division during 2015.

## IV. Storm Preparedness Initiatives

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

#### <u>Initiative #1 - Vegetation Management Programs for Distribution Circuits</u>

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.

<u>Performance Metrics:</u> 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. In addition, a new table labeled "2015 - FPUC Feeder Specific Data for Attached Laterals (Vegetation Related)" has been included below to aid further analysis.

FPUC Consolidated Vegetation Management Performance Metrics – 2015

		Feeders			Laterals	_
	Unadjusted	Adjusted	Diff.	Unadjusted	Adjusted	Diff.
(A) Number of Outages	2	2	0	293	293	0
(B) Customer Interruptions	3310	3310	0	11959	11959	0
(C) Miles Cleared	50.68	50.68	0	134.48	134.48	0
(D) Remaining Miles (Note 1, 2 & 3)	56.60	56.60	0	291.00	291.00	0
(E) Outages per Mile [A ÷ (C + D)]	0.02	0.02	0.00	0.69	0.69	0.00
(F) Vegetation CI per Mile [B ÷ (C + D)]	30.85	30.85	0.00	28.11	28.11	0.00
(G) Number of Hotspot trims	261	261	0	NA	NA	NA
(H) All Vegetation Management Costs	\$959,359	\$959,359	0	(Note 4)	(Note 4)	(Note 4)
(I) Customer Minutes of Interruption	155,928	155,928	0	847,058	847,058	0
(J) Outage restoration costs	(Note 5)	(Note 5)	0	NA	NA	NA
(K) Vegetation Budget (current year)	\$944,120	\$944,120	\$-	NA	NA	NA
(L) Vegetation Goal (current year)	\$944,120	\$944,120	\$-	NA	NA	NA
(M) Vegetation Budget (next year)	\$934,300	\$934,300	\$-	NA	NA	NA
(N) Vegetation Goal (next year)	\$934,300	\$934,300	\$-	NA	NA	NA
(O) Trim-Back Distance	(Note 6)	(Note 6)	0	(Note 6)	(Note 6)	NA

#### <u>Danger Trees (FPUC Totals) – Additional Questions</u>

- a) Number of danger trees removed? 345
- b) Expenditures on danger tree removal? \$80,000 (Estimated)
- c) Number of request for removals that were denied? 0
- d) Avoided CI with danger trees removed (estimate)? N/A
- e) Avoided CMI with danger trees removed (estimate)? N/A
- Note 1: Miles cleared in 2015 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 that 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 - 2015**

		Feeders			Laterals	_
	Unadjusted	Adjusted	Diff.	Unadjusted	Adjusted	Diff.
(A) Number of Outages	1	1	0	50	50	0
(B) Customer Interruptions	1829	1829	0	4904	4904	0
(C) Miles Cleared (Notes 1 & 2)	35.12	35.12	0	22.97	22.97	0
(D) Remaining Miles (Note 2 & 3)	-2.55	-2.55	0	24.37	24.37	0
(E) Outages per Mile [A ÷ (C + D)]	0.03	0.03	0	1.06	1.06	0
(F) Vegetation CI per Mile [B ÷ (C + D)]	56.16	56.16	0	103.59	103.59	0
(G) Number of Hotspot trims	NA	NA	0	NA	NA	NA
(H) All Vegetation Management Costs	\$292,687	\$292,687	0	(Note 4)	(Note 4)	(Note 4)
(I) Customer Minutes of Interruption	109,252	109,252	0	350,614	350,614	0
(J) Outage restoration costs	(Note 5)	(Note 5)	NA	NA	NA	NA
(K) Vegetation Budget (current year)	\$342,210	\$342,210	\$-	NA	NA	NA
(L) Vegetation Goal (current year)	\$342,210	\$342,210	\$-	NA	NA	NA
(M) Vegetation Budget (next year)	\$252,000	\$252,000	\$-	NA	NA	NA
(N) Vegetation Goal (next year)	\$252,000	\$252,000	\$-	NA	NA	NA
(O) Trim-Back Distance	(Note 6)	(Note 6)	0	(Note 6)	(Note 6)	NA

#### <u>Danger Trees (NE Division) – Additional Questions</u>

- a) Number of danger trees removed? 27
- b) Expenditures on danger tree removal? 10,000 (estimated)
- c) Number of request for removals that were denied? 0
- d) Avoided CI with danger trees removed (estimate)? NA
- e) Avoided CMI with danger trees removed (estimate)? NA
- Note 1: Miles cleared in 2015 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 that 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 – 2015**

		Feeders			Laterals	
	Unadjusted	Adjusted	Diff.	Unadjusted	Adjusted	Diff.
(A) Number of Outages	1	1	0	243	243	0
(B) Customer Interruptions	1481	1481	0	7055	7055	0
(C) Miles Cleared (note 1 & 2)	15.56	15.56	0	111.51	111.51	0
(D) Remaining Miles	59.15	59.15	0	266.63	266.63	0
(E) Outages per Mile [A ÷ (C + D)]	0.13	0.13	0	0.64	0.64	0
(F) Vegetation CI per Mile [B ÷ (C + D)]	19.82	19.82	0	18.66	18.66	0
(G) Number of Hotspot trims	NA	NA	0	NA	NA	NA
(H) All Vegetation Management Costs	\$666,673	\$666,673	0	(Note 4)	(Note 4)	
(I) Customer Minutes of Interruption	46,676	46,676	0	496,445	496,445	0
(J) Outage restoration costs	(Note 5)	(Note 5)	NA	NA	NA	NA
(K) Vegetation Budget (current year)	\$601,910	\$601,910	0	NA	NA	NA
(L) Vegetation Goal (current year)	\$601,910	\$601,910	0	NA	NA	NA
(M) Vegetation Budget (next year)	\$682,300	\$682,300	0	NA	NA	NA
(N) Vegetation Goal (next year)	\$682,300	\$682,300	0	NA	NA	NA
(O) Trim-Back Distance	10	10	NA	10	10	NA

#### <u>Danger Trees (NW Division) – Additional Questions</u>

- a) Number of danger trees removed? 318
- b) Expenditures on danger tree removal? \$70,000 (Estimated)
- c) Number of request for removals that were denied? 0
- d) Avoided CI with danger trees removed (estimate)? N/A
- e) Avoided CMI with danger trees removed (estimate)? N/A
- Note 1: Miles cleared in 2015 include total miles of main feeders and laterals and hot spot trimming.
- Note 2: NW Division uses GIS system to obtain miles of feeders and laterals.
- Note 4: Vegetation management costs have not been separated between main feeders and laterals.
- Note 5: Outage restoration costs have not been historically documented.

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

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

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

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

## NE DIVISION - TREE TRIM SCHEDULE - Main Feeders 2015 - 2017

- **2015** 1. Feeder#201(69KV)
  - 2. Feeder#202 (69KV)
  - 3. Feeder#802(138KV)
  - 4. Feeder#803(138KV)
  - 5. Feeder#211
  - 6. Feeder#215
  - 7. Feeder#209
- **2016** 1. Feeder#310
  - 2. Feeder#311
  - 3. Feeder#315 (69KV)
  - 4. Feeder#102
  - 5. Feeder#210
  - 6. Feeder#313 (69KV)
- **2017** 1. Feeder#104
  - 2. Feeder#110
  - 3. Feeder#111
  - 4. Feeder#212
  - 5. Feeder#214

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

- **2015** 1. Feeder#110
  - 2. Feeder#111
- **2016** 1. Feeder#209
  - 2. Feeder#214
- **2017** 1. Feeder#211
  - 2. Feeder#215
- **2018** 1. Feeder#310
  - 2. Feeder#210
- **2019** 1. Feeder#102
  - 2. Feeder#311
- **2020** 1. Feeder#104
  - 2. Feeder#212

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

<sup>\*</sup> 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

#### 2015 FPUC NE Division - D&T Vegetation Management\*\* **Feeder Laterals TOTALS Main Feeder Main Feeder Feeder Laterals** Feeder # UG (miles) OH (feet) UG (miles) UG (feet) UG (feet) OH (miles) OH (miles) UG (miles) OH (miles) OH (feet) 29,710 0 20,640 0 5.63 0.00 3.91 0.00 9.54 311 0.00 310 13,850 0 15,550 0 2.62 0.00 2.95 0.00 5.57 0.00 209 47,200 11,300 0.00 2.14 0.00 0 0 8.94 11.08 0.00 210 0.00 21,100 0 11,950 0 4.00 2.26 0.00 6.26 0.00 1.39 211 20,260 0 7,350 0 3.84 0.00 0.00 5.23 0.00 212 1,340 0 1,210 0 0.25 0.00 0.23 0.00 0.48 0.00 9,950 0 19,250 0.00 3.65 0.00 5.53 214 0 1.88 0.00 215 21,900 0 13,500 0 4.15 0.00 2.56 0.00 6.70 0.00 102 4,900 0 13,600 0 0.93 0.00 2.58 0.00 3.50 0.00 250 104 0 0 0.05 0.00 0.00 0.00 0.05 0.00 110 6,800 0 1,100 0 1.29 0.00 0.21 0.00 1.50 0.00 111 2.65 8,153 0 5,850 0 1.54 0.00 1.11 0.00 0.00 185,413 Dist. Totals 0 121,300 0 35.12 0.00 22.97 0.00 58.09 0.00 69KV Line 10,800 0 0 0 2.05 0 0 0 0 0 138KV Line 24,077 0 0 0 4.56 0 0 0 0 0 **D&T Totals** 220,290 121,300 41.72 22.97 58.09

<sup>\*\* 2015</sup> Trim Totals

	F	PUC N	W Division	- D&T Ve	getation	Manag	ement*			
	Main Fe	eder	Feeder L	aterals.	Main F	eeder	Feeder L	aterals	тоти	ALS
Feeder #	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
Dist. Totals	559,135	546	2,672,006	182,628	105.89	0.10	506.06	34.59	611.95	34.69

<sup>\*</sup> 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

		ı				ation Ma				
	Main Fee	eder	Feeder Laterals		Main Feeder		Feeder Laterals		TOTALS	
Feeder #	OH (feet)	UG (feet)	OH (feet)	UG (feet)	OH (miles)	UG (miles)	OH (miles)	UG (miles)	OH (miles)	UG (miles)
90E	0	0	47080	0	0	0.00	8.92	0.00	8.92	0.00
90W	1284	0	15836	0	0.24	0.00	3.00	0.00	3.24	0.00
Altha	0	0	102934	0	0	0.00	19.50	0.00	19.50	0.00
Blountstown	0	0	19046	0	0	0.00	3.61	0.00	3.61	0.00
Bristol	0	0	31672	0	0	0.00	6.00	0.00	6.00	0.00
College	16050	0	74044	0	3.04	0.00	14.02	0.00	17.06	0.00
Cottondale	19688	0	96728	0	3.73	0.00	18.32	0.00	22.05	0.00
Dogwood	14552	0	29374	0	2.76	0.00	5.56	0.00	8.32	0.00
Hospital	0	0	48792	0	0	0.00	9.24	0.00	9.24	0.00
Indian Springs	0	0	47508	0	0	0.00	9.00	0.00	9.00	0.00
Malone	13696	0	33384	0	2.59	0.00	6.32	0.00	8.92	0.00
Railroad	1070	0	9630	0	0.20	0.00	1.82	0.00	2.03	0.00
South St	1712	0	32742	0	0.32	0.00	6.20	0.00	6.53	0.00
Family Dollar	0	0	0	0	0	0.00	0	0.00	0	0.00
Prison	0	0	0	0	0	0.00	0	0.00	0	0.00
Industrial Pk	14124	0	0	0	2.68	0.00	0	0.00	2.68	0.00
Dist. Totals	82176	0	588770	0	15.56	0	111.51	0	127.07	0

<sup>\*\* 2015</sup> Trim Totals

2015 - FPUC Feeder Specific Data for Attached Laterals (Vegetation Related)										Veget	tation F	Related	(k
			•		eeder		Laterals		ALS	Feeder	Feeder	Feeder	Feeder
Feeder	Division	Feeder Type	Customers (Approx.)	OH (miles)	UG (miles)	OH (miles)	UG (miles)	OH (miles)	UG (miles)	Lateral CI	Lateral CMI	Circuit Looped?	Events N
102 SOUTH FLETCHER	NE	Hybrid	1819	3.7	0.55	6.92	20.62	10.62	21.17	2861	147747	Yes	14
110 PLANTATION RD	NE	Hybrid	1385	2.99	0.36	0.41	31.8	3.4	32.16	1389	135822	Yes	3
111 PLANTATION FD	NE	Hybrid	710	1.96	1.14	1.51	17.13	3.47	18.27	1267	112763	Yes	1
210 BUSS TIE	NE	Hybrid	710	2.03	0.32	4.76	0.98	6.79	1.3	18	1060	Yes	3
211 JASMINE STREET	NE	Hybrid	1755	2.88	0	11.28	4.59	14.16	4.59	38	3302	Yes	5
212 ELEVENTH STREET	NE	Hybrid	826	3.29	0	10.7	1.84	13.99	1.84	102	4435	Yes	7
214 CLINCH DRIVE	NE	Hybrid	534	2.89	0	4.78	1.28	7.67	1.28	673	40576	Yes	6
215 SADLER RD	NE	Hybrid	951	2.71	0	1.92	7.58	4.63	7.58	34	3277	Yes	2
310 BONNIEVIEW	NE	Hybrid	1307	3.39	0.18	7.85	6.75	11.24	6.93	18	1166	Yes	6
311 BAILEY	NE	Hybrid	2101	6.19	0	9.0	19.4	15.19	19.4	333	9718	Yes	4
9952 ALTHA	NW	Hybrid	649	4.6	0	46.3	0.54	50.9	0.54	228	15747	No	11
9972 BLOUNTSTOWN	NW	Hybrid	206	6.27	0	7.55	0.43	13.82	0.43	72	4850	Yes	3
9882 BRISTOL	NW	Hybrid	926	11.52	0	42.5	1.12	54.02	1.12	532	26688	No	9
9982 COLLEGE	NW	Hybrid	1,172	13.44	0	40.43	6.91	53.87	6.91	1339	48840	Yes	42
9866 COTTONDALE	NW	Hybrid	1,483	11.72	0	68.09	1.84	79.81	1.84	2533	106448	No	32
9722 DOGWOOD HT	NW	Hybrid	301	4.26	0	11.04	0.55	15.3	0.55	31	2282	Yes	8
9742 GREENWOOD	NW	Hybrid	1,139	10.59	0	50.13	1.4	60.72	1.4	397	35428	No	26
9872 HOSPITAL	NW	Hybrid	796	2.58	0	37.27	0.47	39.85	0.47	241	7469	Yes	11
9942 HWY 90E	NW	Hybrid	992	11.26	0	51.19	4.39	62.45	4.39	242	36451	No	19
9992 HWY 90W	NW	Hybrid	955	4.44	0.11	11.42	0.34	15.86	0.45	97	10358	Yes	13
9932 INDIAN SPR	NW	Hybrid	926	5.7	0.03	26.5	7.83	32.2	7.86	1216	106920	No	21
9732 PRISON	NW	Hybrid	49	3.21	0	2.51	3.39	5.72	3.39	1	67	No	1
9512 RAILROAD	NW	Hybrid	548	6.45	0	9.9	1.55	16.35	1.55	158	4024	Yes	3
9854 SOUTH ST	NW	Hybrid	2,091	7.19	0	100.05	4.22	107.24	4.22	1449	137548	Yes	45
TOTALS			25,104	135.26	2.69	564.01	146.95	699.27	149.64	15,269	1,002,987		295

#### <u>Initiative #2 – Joint Use Pole Attachment Audit</u>

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. Current Telco agreements will expire 12/31/2015 and have 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 only Southern Light and Brighthouse Network agreements have been executed. AT&T has elected to stay with the current agreement and focus on a negotiated amendment. Joint Use Agreement negotiations are ongoing, and in varying stages of completion with CenturyLink, Fairpoint Communications, Comcast and Crown Castle. However, joint use pole attachment audits have been scheduled and are to begin during the third quarter of 2016.

#### 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 and eighteen (218) 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

	Acti	vity	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>	100%	<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.*	100%	100%	<u>NA</u>	<u>NA</u>	100%	<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>

<sup>\*</sup> Inspections performed were visual

<sup>\*\*</sup> Current accounting system does not provide data to this level

<sup>\*\*\* 6</sup> yr. climbing inspection completed in 2012

#### **Transmission Tower Structure Inspections**

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

<sup>\* 6</sup> yr. climbing inspection completed in 2012

**Transmission Pole Inspections** 

Transmission Fore Inspections										
	Acti	vity	Current	Budget	Next	Year				
	Goal	Actual	Budget	Actual	Goal	Budget				
(A) Total number of transmission poles. * **	309	309	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>				
(B) Number of transmission poles strength tested.	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>				
(C) Number of transmission poles passing strength test.	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>				
(D) Number of transmission poles failing strength test (overloaded).	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>				
(E) Number of transmission poles failing strength test (other reasons).	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>				
(F) Number of transmission poles corrected (strength failure).	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>				
(G) Number of transmission poles corrected (other reasons).	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>				
(H) Total transmission poles replaced.	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>				

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

<sup>\*\*</sup> Current accounting system does not provide data to this level

<sup>\*\* 6</sup> yr. climbing inspection completed in 2012

#### <u>Initiative #4 – Storm Hardening of Existing Transmission Structures</u>

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 218 poles of which 75 are concrete poles. All installations met the NESC code requirements in effect at the time of construction. A policy of replacing existing wood poles with concrete 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.

In 2015 FPU began designing the replacement of 21 existing 69KV wood poles with new spun concrete structures which will be able withstand extreme wind loading of 130 mph

NW Division currently has no transmission structures.

Hardening of Existing Transmission Structures

1100 0 0 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2									
	Acti	vity	Current	t Budget	Nex	t Year			
	Goal	Actual	Budget	Actual	Goal	Budget			
(A) Transmission structures scheduled for hardening.	0	0	0	0	4	\$200,000			
(B) Transmission structures hardening completed.	0	0	0	0	0	0			
(C) Percent transmission structures hardening completed.	0	0	0	0	0	0			

#### <u>Initiative #5 – Geographic Information System</u>

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, will be instrumental in conducting future 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 mangers, supervisors and employees via smart mobile phones. The plan to enable customer outage calls to be automatically logged into the system has been postponed until 2016 due to the need to upgrade internal phone systems. By the end of 2015 FPU purchased an IPad application that will enhance the current OMS by enabling crews to electronically receive and close outages while in the field. Implementation of this tool is planned for the middle of 2016.

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

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

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

#### FORENSIC DATA COLLECTION AND REPORTING

#### **PURPOSE:**

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

#### **PROCESS:**

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

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

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

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

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

#### **RESPONSIBILITIES:**

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

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

#### **REPORTING:**

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

### <u>Initiative #7 – Reliability Performance of Overhead vs Underground Systems</u>

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 2015 there were only four small projects converting OH to UG in the NW Division. All four projects were at Chipola College. No OH to UG conversions were completed in the NE Division during 2015.

## 2015 - 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
ОН	1048	78.29	79.29	3565482	45096	82052		
UG	36	128.57	65.34	56336	861	4628		
Total	1084	79.96	78.81	3621818	45957	86681	127.37	1.62

Total # of Customers at end of 2015 ==>

28,436

2015 - C	)H Relia	bility by	, Feede	r - FPUC N	E (Adjusted	d)		
FEEDER	Outage Events (N)	Ave. Duration (L Bar)	CAIDI	Customer Min. Interrupted (CMI)	Customer Interruptions (CI)	Outage Duration (L)	SAIDI	SAIFI
SOUTH FLETCHER (102)	28	86.72	84.25	460194	5462	2428		
PLANTATION ROADSIDE (110)	4	84.71	97.87	136233	1392	339		
PLANTATION FIELDSIDE (111)	5	55.15	83.85	119986	1431	276		
FIFTEENTH STREET (209)	7	101.79	209.94	52486	250	713		
210 (210)	12	75.20	71.76	12342	172	902		
JASMINE STREET (211)	26	91.94	88.99	78931	887	2390		
212 (212)	30	83.93	98.56	43861	445	2518		
CLINCH DRIVE (214)	22	76.80	61.12	56721	928	1690		
SADLER (215)	7	124.36	126.34	8843	70	870		
BONNIEVIEW (310)	14	58.91	85.38	85973	1007	825		
BAILEY (311)	16	75.03	94.72	518703	5476	1200		
TOTAL	171	82.76	89.86	1,574,273	17,520	14151	99.72	1.11

15,787

Total # of NE Customers in 2015:

2015 - 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)	1	17.78	17.78	10581	595	18			
PLANTATION FIELDSIDE (111)	1	81.22	81.22	2680	33	81			
210 (210)	1	128.32	128.32	257	2	128			
SADLER (215)	1	207.50	106.00	1038	5	208			
BAILEY (311)	2	161.38	154.19	1079	7	323			
TOTAL	6	126.26	24.35	15,635	642	758	0.99	0.04	

Total # of NE Customers in 2015: 15,787

2015 - 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)	49	76.55	76.79	96447	1256	3751			
BLOUNTSTOWN (9972)	16	69.22	64.49	13802	214	1108			
BRISTOL (9882)	41	59.51	72.98	179821	2464	2440			
COLLEGE (9982)	112	80.92	92.15	409218	4441	9063			
COTTONDALE (9866)	85	67.96	49.17	176950	3599	5777			
DOGWOOD HEIGHTS (9722)	21	91.40	82.28	13329	162	1919			
FAMILY DOLLAR (9782)	6	85.72	92.62	1389	15	514			
GREENWOOD (9742)	94	82.96	76.25	169269	2220	7798			
HOSPITAL (9872)	39	63.44	58.08	119289	2054	2474			
HWY 90E (9942)	64	77.20	66.67	118600	1779	4941			
HWY 90W (9992)	34	91.06	88.40	35713	404	3096			
INDIAN SPRINGS (9932)	57	79.99	83.03	242122	2916	4560			
INDUSTRIAL PARK (9752)	2	88.92	111.88	448	4	178			
PRISON (9732)	6	70.42	70.11	841	12	423	_		
RAILROAD (9512)	16	62.95	36.58	12585	344	1007			
SOUTH STREET (9854)	119	70.17	70.15	294471	4198	8350			
TOTAL	761	75.42	72.25	1,884,295	26082	57,397	148.97	2.06	

Total # of NW Cust. in 2015: 12,649

2015 - UG Reliability by Feeder - FPUC NW (Adjusted)									
FEEDER	Outage Events (N)	Ave. Duration (L Bar)	CAIDI	Customer Min. Interrupted (CMI)	Customer Interruptions (CI)	Outage Duration (L)	SAIDI	SAIFI	
ALTHA (9952)	2	104.32	104.32	209	2	39			
BRISTOL (9882)	1	38.82	38.82	1980	51	511			
COLLEGE (9982)	2	255.41	255.41	511	2	314			
GREENWOOD (9742)	2	157.13	114.92	460	4	41			
HOSPITAL (9872)	1	41.00	41.00	82	2	84			
HWY 90W (9992)	1	83.68	83.68	335	4	34			
INDIAN SPRINGS (9932)	1	33.65	33.65	67	2	39			
TOTAL	10	123.09	54.37	3,643	67	1,231	0.29	0.01	

# of NW Customers in 2015:

12,649

#### <u>Initiative #8 – Utility Company Coordination with Local Governments</u>

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 and the City of Marianna have worked together to complete a project of undergrounding in the downtown area of Marianna and are planning further projects. FPU is also working with a citizens group on Amelia Island that is interested in undergrounding our overhead facilities on the island. Although these projects have improved aesthetics as the major goal, they will provide a reliability case study area that can be used in future undergrounding analysis.

#### **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.

For 2014, research focused on undergrounding, wind data collection, and public outreach. The Steering Committee is preparing the next steps in these research areas.

The 2015 report follows on the next page.

#### Report on Collaborative Research for Hurricane Hardening

Provided by

The Public Utility Research Center University of Florida

To the

**Utility Sponsor Steering Committee** 

February 2016

#### 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 recently approved 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 2015.

#### II. Undergrounding

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

The collaborative has refined the computer model developed by Quanta Technologies and there has been a collective effort to learn more about the function and functionality of the computer code. PURC and the Project Sponsors have worked to fill information gaps for model inputs and significant efforts have been invested in the area of forensics data collection. Since the state has not been affected by any hurricanes since the database software was completed, there is currently no data. Therefore, future efforts to refine the undergrounding model will occur when such data becomes available.

In addition, PURC has worked with doctoral and master's candidates in the University of Florida Department of Civil and Coastal Engineering to assess some of the inter-relationships between wind speed and other environmental factors on utility equipment damage. PURC has also been contacted by engineering researchers at the University of Wisconsin and North Carolina State University with an interest in the model, though no additional relationships have been established. In addition to universities, PURC was 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. Every researcher that contacts PURC cites the model as the only non-proprietary model of its kind.

The research discussed in last year's report 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.

#### III. Wind Data Collection

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

#### IV. Public Outreach

In last year's report we discussed the impact of increasingly severe storms on greater interest in storm preparedness. PURC researchers discussed the collaborative effort in Florida with the engineering departments of the state regulators in Connecticut, New York, and New Jersey, 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 continue to utilize the insight gained through the hurricane hardening research to contribute to the debate on undergrounding in the popular press, and reinforce the state of Florida as a thought leader in this area. PURC Director of Energy Studies Ted Kury was asked to contribute an article to the second quarter issue of *Utility Horizons* describing the modeling methodology for assessing the undergrounding of power lines. The essay also provided a link to an *Electricity Journal* article by Kury and Lynne Holt, another PURC researcher, which discusses Florida's cooperative approach and holds it up as a "best practice" in regulation. In addition, Kury has conducted interviews for the general press on the costs and benefits of underground power lines.

#### V. 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.

#### <u>Initiative #10 – Natural Disaster Preparedness and Recovery Program</u>

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

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

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

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

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

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

Emergency Procedures for both divisions were updated during 2015 and are included below:

# FLORIDA PUBLIC UTILITIES COMPANY



## NORTHWEST FLORIDA DIVISION

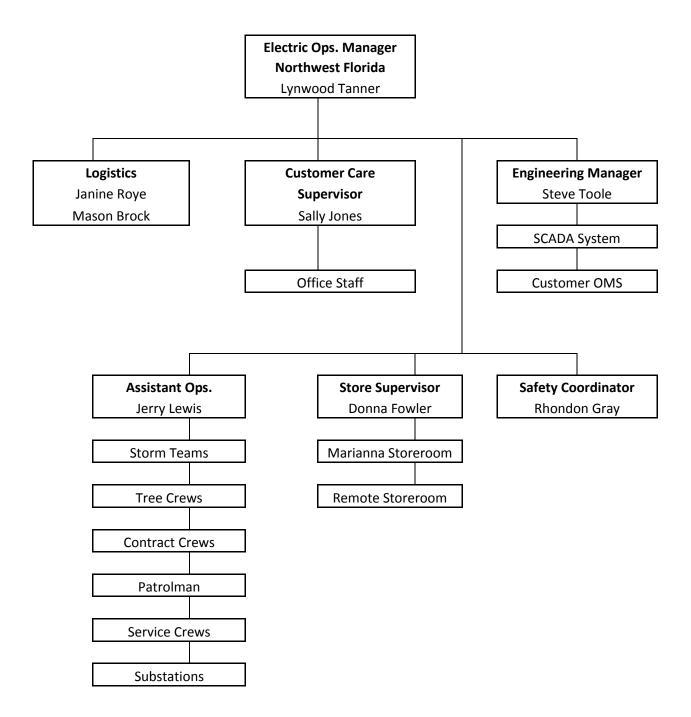
# 2016 EMERGENCY PROCEDURES

#### 1. OBJECTIVE

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

- A. The <u>safety</u> 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. <u>EMERGENCY PERSONNEL POLICY</u>

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 <u>may</u> 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 <u>all</u> 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 exists. 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 General Manager, Engineering Manager, Line and Service Supervisors 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 <u>REASONABLE</u> 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 <u>safety</u> 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. <u>EMERGENCY SAFETY PRECAUTIONS</u>

<u>All Rules in the Safe Practices Manual Should be Observed.</u> 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.
- That there is a sufficient amount of each kind of protective equipment on hand to thoroughly protect the work man.
- 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. <u>DISTRIBUTION CIRCUITS ON OR NEAR TRANSMISSION POLES:</u>

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. <u>STREET LIGHTING WIRES:</u>

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 <u>numbers</u> 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 <u>identity</u> of person giving order secured. Likewise, the operator giving an order must secure <u>identity</u> of person to whom it is given.

#### H. SWITCHING ORDER:

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.* 

#### I. 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.

#### J. <u>BROKEN CONDUCTORS:</u>

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

#### 6. <u>ANNUAL PREPARATIONS</u>

#### **Operations Manager, Northwest Florida**

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

#### **Engineering 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.** Update and have on hand the following:
  - 1) Storm safety precautions
  - 2) General operating instructions
  - 3) Distribution maps
  - 4) Single line switching maps
  - 5) City and county maps
- **D.** Have necessary emergency material delivered prior to June 1.

#### **Logistics**

- **A.** Update the list of critical customers by town/county. Group the critical customers by town/county by classification:
  - 1) Hospitals and clinics

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

## **Assistant Ops./ Line Supervisors**

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

# 7. PREPARATION JUST PROIR TO THE EMERGENCY

# **Operations Manager, Northwest Florida**

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

### **Assistant Ops./Line and Service Supervisors**

- 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 boat and trailer suitable for construction.
- J. Ensure all vehicle repairs are made and final arrangements with vehicle repair facilities confirmed.
- K. Check on emergency generators and secure additional generators if needed.

### **Logistics**

- A. Arrange for additional petty cash and cash advances (if necessary).
- B. Arrange with telephone company additional lines if necessary.

- C. Ensure all computers are backed up and secured.
- D. Ensure all paperwork/documents are filed and secured properly.
- E. Provide control room with customer list, addresses, phone numbers and account numbers.
- F. 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.
- G. Make definite arrangements for contract crew lodging.
- H. Make definite arrangements for food/water/drinks for all personnel.
- I. Purchase food supply for office/warehouse prior to storm (if the severity of the storm warrants this).
- J. Make arrangements for an abundant supply of ice.
- K. Make definite arrangements for building security.
- L. Make definite arrangements for Division Office supplies (See Annual Preparations, Logistics Manager, and Item E.)

### **Engineering Manager**

- A. Provide distribution maps, procedures, etc. as necessary.
- B. Ensure SCADA and Mapping System is backed up and operating.
- C. Begin constant monitoring customer outages and SCADA system.
- D. Ensure SCADA system repeaters have auxiliary power source and/or generator.
- E. Monitor time/material needs of contractors.
- F. Assemble for safety briefing.

# 8. **DURING THE EMERGENCY**

# **Operations Manager, Northwest Florida**

- 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.

### **Engineering Manager**

- A. Be located at the Northwest Florida office and constantly monitor the situation and restoration process.
- B. Coordinate overall restoration process.

- C. Process customer outage system analysis and monitoring SCADA system to determine outage locations.
- D. Activate control room.

### **Logistics**

- Be located at the Northwest Florida office 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.
- Work with General Manager and Operations Manager and begin making final logistical arrangements for outside crews.

# Assist. Ops./Line and Service Supervisors

- A. Be located at the Northwest Florida office
- B. Work with General Manager and Engineering Manager to determine restoration requirements.

# 9. <u>AFTER THE EMERGENCY</u>

# Operations Manager, Northwest Florida

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

### **Engineering Manager**

- 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 General Manager.
- E. Provide updates to General Manager as needed concerning restoration progress.
- F. Monitor manpower and equipment requirements and update General Manager as required.
- G. Keep a list of all company and outside crews and their locations.

H. Monitor storeroom and remote storeroom for proper operation and inventory. Analyze manpower requirements.

#### Logistics

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

### Assist. Ops/Line and Service Supervisors

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

# 10. OPERATING PROCEDURE

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

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

# A. <u>Before the Storm</u>

All operating personnel should be instructed as to:

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

## B. <u>During the Storm</u>

# 1) <u>First Stage - Repairing All Cases Reported</u>

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

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

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

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

# 3) <u>Third Stage - De-energizing Main Lines</u>

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

### C. After the Storm

# 1) Sequence of Restoration

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

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

# 2) <u>Line Patrols</u>

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. <u>TELEPHONE OPERATORS GUIDE</u>

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

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

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

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

<u>Phase 3</u> - 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 (<u>time</u>). If your electricity us not on by that time, please call again. Thank you."

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

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

### **Entering Outages**

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

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

# 12. <u>MEDIA/PUBLIC INFORMATION GUIDE</u>

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

# 13. WAREHOUSE PROCEDURE

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

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

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

# 14. PERSONNEL BACKUP CONTINGENCIES

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

Operations Manager, Northwest Florida Assistant Operations Manager Engineering Manager

Engineering Manager
Assistant Operations Manager
Operations Manager
Logistics Manager
Energy Conservation Representative

# 15. <u>EMPLOYEE ASSIGNMENTS</u>

# **TENTATIVE SCHEDULE**

6:00 /	DAY SHIFT  AM Reporting Time	NIGHT SHIFT 6:00 PM Reporting Time	
	OFFICE		<u>OFFICE</u>
Lynwood Tanner	Electric Ops Manager, NW	Donna Fowler	Stores Manager
Steve Toole	Engineering Manager	Pam Thomas	Telephone
Janine Roye	Logistics Lead		
Mason Brock	Logistics		
		Donnie Tew	Engineering /Cust. Outages
Sally Jones	Customer Care Supervisor		
Amber Cumbie	Telephone		SERVICE CREWS
Laura McCoy	Telephone	Darryl Grooms	Crew Leader
Chastity Gokey	Telephone	Stephen Amos	Apprentice Lineman
SERV	ICE / LINE CREWS		
Jerry Lewis	Assist. Ops		
Bradley Flowers	Lineman		PATROLMAN/GUIDE
James Ussery	Senior Lineman		Patrol/Guide
Alvin Foran	Crew Leader		
Kevin Harris	Lineman		
Jeremy Hill	Lineman		
Andy Bevis	Lineman		
Eric Norris	Lineman		
Chris Allen	Lineman		
Bobby See	IMC Technician I		
John Griffin	IMC Technician I		
	STORES	1	
Donna Fowler	Stores Supervisor		
Doug Jones	Warehouseman	4	
PATR	OL/GUIDE/SAFETY		
Rhondon Gray	SAFETY		
Virginia Nail	Patrol/Guide		
Kate Jones	Patrol/Guide		

# 16. <u>EMERGENCY ASSISTANCE LIST</u>

Company	Contact	Telephone	Available Resources
Gulf Power Company	Andy McOuagge	(850) 872-3220	Crews

West Florida Electric Coop	Bill Rimes	(850) 263-6518	Crews
FPU-Fernandina Beach	Bill Grant	(904) 277-1957	Crews
Davey Tree	Russell Brooks	(352) 279-8622	Tree Crews
DaveyTree	Russell Brooks	(228) 396-5810	Tree Crews
City of Tallahassee		(850) 599-5811	Crews
Talquin Electric Coop		(850) 627-7651	Crews
Gulf Coast Electric Coop		(850) 877-6166	Crews
Public Service Commission	Joseph Jenkins	(850) 488-8501	
Public Service Commission	Bob Trapp	(850) 488-8501	
Red Simpson Inc	John Simpson	(318) 487-1074	Crews
Florida Electric Power Coord Group	R J Midulla	(813) 289-5644	Crews
Mastec	Copper Nelson	(850) 519-0664	Crews
Utilicon	Gene Holley	(478) 348-3233	Crews
		(850) 890-0131 cell	
		(850) 638-7129 home	
Harper Electric	Mark Harper	(334) 222-7022	
		(334) 222-7854	
		(334) 343-1703 cell	

Vehicle Repairs Assistance			
Company	Contact	Telephone	Available Resources
Altec Industries Inc		(205) 458-3850	Mechanical Repairs
Altec Industries Inc		(205) 458-3857	Mechanical Repairs
Altec Industries Inc		(205) 458-3889	Mechanical Repairs
Altec Industries Inc		(205) 458-3849	Mechanical Repairs
Altec Industries Inc		(205) 458-3848	Mechanical Repairs
Auto Clinic	Office	(904) 482-6632	Mechanical Repairs
Auto Clinic	Mike Krieser	(850) 569-8475	Mechanical Repairs
Auto Clinic		258-6274	Mechanical Repairs
Dale Brannon	Dale Brannon	352-4613 shop	Wrecker
		(850) 573-0275 cell	Wrecker

# 17. EMERGENCY STOCK REQUIREMENTS

31-1320	Wire, #4 AAAC Bare	25,000	
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	75	
35-1165	Arrester, MOV, Riser	25	
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	
35-3030	Insulator, Horizontal, 35 V	25	
35-3110	Insulator, Suspension	100	
35-3115	Insulator, Fiberglass Rod 12"	50	
35-3120	Insulator, Fiberglass Rod 5'	25	
35-3470	Pin, Fiberglass Stand Off	100	
35-3520	Pole, 30'/6	30	
35-3550	Pole, 40'/4	30	
35-3575	Pole, 45'/3	25	
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, 60 Amp	25	
91-1090	Transformer, 15 KVA	20	
91-1100	Transformer, 25 KVA	15	
91-1110	Transformer, 37.5 KVA	5	
91-1120	Transformer, 50 KVA	5	

# 18. TRANSPORTATION AND EQUIPMENT

TRUCK#	ITEM DESCRIPTION	X	Y	Z	GPS INSTALLED	VEHICLE OPERABLE	DATE	BY	CONTACT/ COMMENTS
810	Fork Lift								
859	Pole Trailer								
860	Material Trailer								
861	Combination Pole Trailer								
862	Wire Retrieving Trailer								
863	Wire Pulling Trailer								
969	Freightliner/Derrick								
979	Freightliner/Derrick								
968	Material Handler/Freightliner								
980	Bucket Truck								
982	Pick-Up Truck (Griffin)								
991	Rav4(Jones)								
990	Rav4 (Nail)								
957	Toyota Pre-Runner (Tew)								
954	Altec Material Handler								
974	Altec Material Handler  Altec Material Handler								
956	Chevy Pickup (Flag)								
959	Toyota Tundra (Spare)								
985	Ford Pickup (Tanner)								
983	Altec Service Material Handler								
962	Ford Transit (See)								
0.65	A1. 26. 1177 11								
965	Altec Material Handler							-	
986	Ford Pickup (Lewis)								
989	Toy. Pickup (Register)							_	
865	Signboard							_	
866	Trailer								
978	GMC Pickup (Toole)								
987	Ford Exp. (Shelley)								
984	Toyota Rav4 (Brock)								
992	Chevy Pickup (Gray)								

# 19. CRITICAL CUSTOMER LIST

# A. Hospitals, Clinics, Nursing Homes

Name	Address	Telephone	Contact Person
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

Name	Address	Teleph	one Contact Person
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.	"	11
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

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

# D. Municipal and State Emergency Services

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

# E. Communication and Broadcasting Services

Name	Address	Telephone	Contact Person
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

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

# G. Correction Facilities

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

# H. Airports

Address	Telephone	Contact Person
3633 Industrial Park I	Or 482-8480	
Greenwood	594-3224	
Industrial Park Dr.	482-2281	
	3633 Industrial Park I Greenwood	3633 Industrial Park Dr 482-8480 Greenwood 594-3224

# \*EMERGENCY FUEL

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

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

# 21. EMERGENCY TELEPHONE LISTING

A. Telephone Repair

Century Link (Wilton Crawford) 526-3481 or (611)

B. Radio Repair

Verizon (Jerry Fox) (850) 867-9633

C. Gulf Power Company

Pensacola Dispatcher 444-6517 Panama City Dispatcher 872-3261 Storm Coordinator 785-8305

Mike Menk (Southern Company) (205)257-2599 / (205)515-2066 mobile

Andy McQuagge 872-3220

D. Emergency Management

Jackson County (Rodney Andreason)

" " " 536-4500

Calhoun County (Don O'Bryan) 674-8075/5161

Liberty County (Jerry Butler) 643-3477

State Office (Eric Torbett) 413-9911

E. Law Enforcement - 911

**Jackson County** 482-9624 / 482-9648 Calhoun County 674-5049/4275 Liberty County 643-2235 Marianna 526-3125 Greenwood 482-9648 Malone 482-9648 Cottondale 352-4361 Alford 482-9648 Altha 762-3900 **Bristol** 643-2235 Blountstown 674-5987 Bascom 482-9648 Florida Highway Patrol 482-9512

F. Ambulance - 911

Jackson County 482-9669 / 482-9668

Calhoun County 674-5411 Liberty County 643-2235

G. News Media

WTOT/WJAQ (Don Moore) 482-3046
Jackson County Floridan 526-3614
WTVY-Channel 4 TV/Dothan (334)792-3195
WJHG-Channel 7 TV/Panama City 234-2125 / 526-5727
WMBB-Channel 13 TV/Panama City 763-6000 / 482-8007

# H. City/County Officials

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

# I. Public Service Commission

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

# 22. LOGISTICS

Motels:		Air Mattress/Cots:		
Best Western	526-5666	Loftin's Rental Center		526-4680
Comfort Inn	526-5600	North Florida Rentals		526-7368
Microtel	526-5005	Laundry & Linen Servi	ces/Supplies:	
Executive Inn	526-3710	UniMac Express Laundry	7	482-6504
Hampton Inn	526-1006	Nifty Cleaners		482-2825
Holiday Inn Express	526-2900	•		
Ramada Limited	526-3251	First Aid Supplies:		
Best Value Inn	482-4973	Waco Drugs 482-5781	Kelson Drugs	526-2839
		Paramore's 482-3924	Watson's	482-4035
		CVS		
Restaurants:				
Captain D's	482-6230	Firehouse Subs	482-5883	
Beef O Bradys	482-0002	San Marcos	482-0062	
Fortune Cookie	526-3735	Pizza Hut	482-5900	
Jim's Buffet & Grill	526-2366	Gazebo Rest.	526-1276	
Madison's Warehouse	526-4000	Hungry Howies	526-7878	
Dairy Queen	482-1055			
Sonny's Barbecue	526-7274	Catering:		
Ruby Tuesday	526-7100	Sweet Stuff Bakery	526-2250	
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			

**Food Stores:** 

Daffin Food Service 482-4026 **Grocery Outlet** 526-5528 Walmart Superstore 526-5744

Malone IGA 569-2635

Winn Dixie 482-5303 Verizon 526-7701

**Cellular Phones:** 

Water Supply:

**Ice Supply:** FPU (Co. generator to supply water) Winn Dixie 482-5303

Nantze Springs Water Co. 800-239-7873

**Service Stations:** Vehicle Repair Facilities:

Big Little Store 526-5743 **Baker Equipment** 800-765-4908 205-323-8751 Cottondale Texaco 352-2804 Altec Industries Inc Marianna Texaco 482-6105 Thompson Tractor Co 526-2241 Hartsfield Mini-Mart 482-4545 Beall Tire Co 482-323 K & M Expressway 526-5575 Auto Clinic 482-6632 McCoy's Chevron 526-2921

Marianna Chevron 526-2183 Flashlights (20 w/batteries):

Marianna Truck Stop 526-3303 Quantity on hand

Mayer Electric (Additional)800-216-6712 Mike's Texaco, Malone 569-2401

Nugget Oil 482-8585 Portable AM/FM Radios w/batteries: Sangaree BP 482-5241 Murphy USA 526-5744 482-6149 WalMart

Stoney's 482-2028 Tom Thumb 482-4842

### **Necessary Supplies for Northwest Florida Office:**

## **Food Items:**

<u>Item</u>	Quantity	<u>Item</u>	<b>Quantity</b>
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 4 each Onions 1 bag Mayonnaise Mustard 3 each Ketchup 3 each Pastries (miscellaneous) 5 boxes **Bagels** 2 packs

**Supplies:** 

Item Quantity Quantity Item 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

# 23. 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.

# 24. <u>DAMAGE ASSESSMENT PLAN</u>

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.

# General Manager, Northwest Florida

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.

# **Assistant Manager**

Check along Kelson Av to Penn Av then down Penn Av to the office.

# Line Supervisor

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.

# **Engineering Manager**

Check along Hwy 90 from Marianna Substation to Penn Ave.

# 25. DAMAGE ASSESSMENT PLAN

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.



# FLORIDA PUBLIC UTILITIES COMPANY

# NORTHEAST FLORIDA DIVISION

# 2016

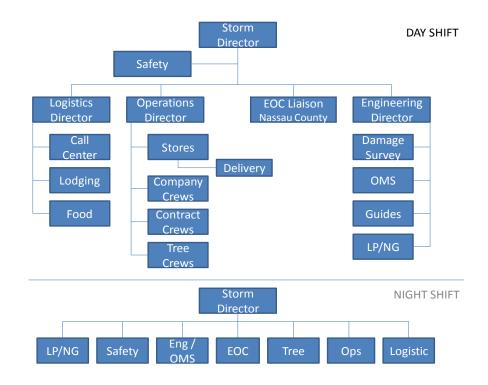
# EMERGENCY PROCEDURES NATURAL DISASTER & RECOVERY

# 1. OBJECTIVE

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

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

# 2. STORM MODE ORGANIZATIONAL CHART



DAY SHIFT	2016	NIGHT SHIFT
WARREN DINAPOLI	STORM DIRECTOR	TBD*
JORGE PUENTES	ENGINEERING DIRECTOR	SHANE MAGNUS
CHRIS HEBERT	OPERATIONS DIRECTOR	TBD*
ROGER LACHARITE	LOGISTICS DIRECTOR	PATTI THORNTON
TODD NEVILLE	SAFETY	TBD*
DAVID RICHARDSON	NASSAU COUNTY EOC LIAISON	TBD*
GEORGE SPEERIN	NATURAL GAS & PROPANE	DAVE PLUTA

<sup>\*</sup>WILL BE FILLED FROM AVAILABLE RESOURCES

### 3. <u>EMERGENCY PERSONNEL POLICY</u>

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.

- K. 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 <u>may</u> be released to go home before the storm threatens safe travel.
- L. 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 <u>all</u> electric, natural gas and propane division employees when an emergency threatens any of the Company's electric service areas.
- M. 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.
- N. EMPLOYEES ARE TO MAKE EVERY <u>REASONABLE</u> 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.
- O. 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.
- P. The Company will endeavor to provide assistance and shelter to employees and their immediate families should an employee need or request assistance.
- Q. Unless emergency conditions warrant, employees will not be required to work in excess of sixteen (16) consecutive hours.

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

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

However, it is the responsibility of each employee to develop a personal plan that can be quickly implemented in case a

storm impacts our area. This plan should involve the protection of family and property which can be put into action quickly and allow for compliance with the above mentioned requirements. Every effort will be made to allow employees time off prior to a storm to make preparations for the event.

### 4. GENERAL RESTORATION GUIDELINES

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

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

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

Restoration activities will be handled in the following manner:

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

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

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

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

# 5. EMERGENCY ELECTRIC SAFETY PRECAUTIONS

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

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

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

# A. EVALUATING THE WORK:

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

- 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.
- 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. <u>DISTRIBUTION CIRCUITS ON OR NEAR TRANSMISSION POLES:</u>

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.

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

# G. SWITCHING ORDERS:

All feeder switching and switching orders shall be communicated to the Operations Director. In all switching orders, the switches shall be referred to by their <u>numbers</u> 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 <u>identity</u> of person giving order secured. Likewise, the operator giving an order must secure <u>identity</u> 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. <u>ANNUAL PREPARATIONS</u>

### **Electric Operations Manager**

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

# **Assistant Electric Operations Manager**

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

### **Safety**

- 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 Director**

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

# 7. <u>INITIATE STORM MODE PLAN</u>

### **Storm Director**

- A. Monitor the emergency.
- B. Begin making preparations for obtaining emergency assistance from other utilities and contractors.
- C. Check the status of personnel on vacation.
- D. Handle all media request by relaying contact information to the Assistant VP of Marketing or the Safety Manager.
- E. Inform all employees as to assignments and emergency information.
- F. Consult with the Executive Team concerning activation of Division Emergency Procedures.
- G. Consult with Executive Team concerning assistance from other divisions (i.e. mechanics, storeroom, media, family assistance, IT/Communications). Personnel from other divisions will be identified and mobilized. They will move as close as practical to Northeast Florida and then proceed to the office as soon after the emergency as travel can be accomplished safely. This location may change dependent upon the situation.
- H. Obtain special job number for all emergency related work.

- I. Make determination on when to release personnel to go home and provide instructions to employees.
- J. Ensure contact with JEA is established.

### **Operations Director**

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

# **Safety**

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

# **Propane Operations Manager**

- A. Have all vehicles stocked with all necessary emergency materials and fuel.
- B. Monitor time/material needs of contractors.
- C. Check emergency stock levels and fuel supplies.
- D. Review plan to supply power to bulk plant using backup power supplies.
- E. Check all communication equipment.
- F. Review safety precautions with all personnel.
- G. Review job assignments with personnel and pass out necessary forms, information.

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

## **Natural Gas Operations Supervisor**

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

# **Logistics Director**

- A. Arrange for additional petty cash and cash advances (if necessary).
- B. Arrange with telephone company additional lines if necessary.
- C. Review assignments with personnel.
- D. Ensure all computers are backed up and secured.
- E. Ensure all paperwork/documents are filed and secured properly.
- F. Provide control room with customer list, addresses, phone numbers and account numbers.
- G. Work with HR department and personnel from other divisions to provide assistance to employees and their families. Assistance may include work to prevent further damage to homes, care for children, to work with contractors or insurance companies and provide food/lodging/clothing, etc.

- H. Make definite arrangements for contract crew lodging.
- I. Make definite arrangements for food/water/drinks for all personnel.
- J. Purchase food supply for office/warehouse prior to storm (if the severity of the storm warrants this).
- K. Run the hurricane report from ORCOM.
- L. Make arrangements for an abundant supply of ice.
- M. Make definite arrangements for building security.
- N. Make definite arrangements for Division Office supplies (See Annual Preparations, Logistics Manager, and Item E.)
- O. Place plastic covering over all electronic or sensitive equipment and secure as necessary.

# **Engineering Director**

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

# 8. <u>INITIAL STAGE OF THE EMERGENCY</u>

# **Storm Director**

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

# **Operations Director**

- A. Be located at the Northeast Florida Operations Center (if possible) and constantly monitor the situation and restoration process.
- B. Coordinate overall restoration process.
- C. Begin analyzing trouble.
- D. Ensure employees that may be working are secure when wind gusts reach 40 miles per hour.
- E. Work with Storm Director to determine restoration requirements.

# **Safety**

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

# **Propane Operations Manager**

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

### **Natural Gas Operations Supervisor**

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

### **Logistics Director**

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

### **Engineering Director**

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

# 9. LOCAL STORM MODE

### **Storm Director**

- A. Determine manpower requirement from information provided by Operations Director and Engineering Director. Contact the Executive Team concerning the situation, if possible, and advise whether or not the additional personnel should continue to the Northeast Florida office. If communications are not possible, the President will determine whether or not the team should continue to Northeast Florida or will return home.
- B. Activate additional services that will be needed during the restoration process to include damage assessment teams and mutual assistance crews.

C. Keep the media informed until such time that the Manager of Communications is available. At that time, the Manager of Communications will work with the Storm Director to keep the Media informed.

# **Operations Director**

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

### **Safety**

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

### **Propane Operations Manager**

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

# **Natural Gas Operations Supervisor**

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

## **Logistics Director**

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

# **Engineering Director**

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

# 10. Operating Procedure

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

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

#### A. BEFORE THE STORM

All operating personnel should be instructed as to:

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

### B. DURING THE STORM

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

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

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

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

- a. Secondary or service wires may be cleared by cutting the conductor away from energized lines or by opening the transformer cut-out.
- b. Damaged primary conductors may be cleared by cutting and <u>rolling back</u>, 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. JEA switch yard to Step-down
- 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) <u>Damage Assessments</u>

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

#### 5) Restoration Order

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

### 11. TELEPHONE OPERATORS GUIDE

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

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

<u>Phase 1</u> - 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.

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

<u>Phase 3</u> - 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 (<u>time</u>). If your electricity us not on by that time, please call again. Thank you."

## Operators Guide

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

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

- 1. Be courteous to each customer.
- 2. Give him/her as much information as is available of the restoration work.
- 3. Record each call and report the information vital to restoring the customer's service.
- 4. Handle each call as briefly as possible.
- 5. Thank the customer for calling.

- 6. Do not give the news media information. If a request for new information is received, record the name of the individual, news organization, telephone number and specific request. Inform the caller that a company representative will return the call. The information should be sent immediately to the Electric Operations Manager, Northeast Florida.
- 7. During an emergency condition, some customers will contact the company for reasons that do not pertain to the emergency. These calls should be recorded and the exact customer needs should be stated in the remarks column. These calls may include disconnections, reconnections, etc., or may be a personal call to an employee. After the contact has been recorded, the completed form should be given directly to the supervisor.

### **Entering Outages**

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

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

### 12. MEDIA/PUBLIC INFORMATION GUIDE

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

### 13. WAREHOUSE PROCEDURE

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

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

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

### 14. <u>OFFICE PROCEDURE</u>

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

- 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. <u>Personnel Backup Contingencies</u>

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. <u>EMPLOYEE ASSIGNMENTS</u>

# **TENTATIVE SCHEDULE**

D.A	AY SHIFT	NIGH	T SHIFT		
	n at 6:00 AM	Begin at 6:00 PM			
	OFFICE	-	FICE		
Buddy Shelley		Detti The anaton			
Warren DiNapoli	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	SERVIC	E CREWS		
David Richardson	EOC Rep	Shannon Wagner	Crew Leader		
Linda Winston	Logistics	Stevie Mitchell Jr.	Apprentice		
Linda Gamble	Telephone				
Renee Bolyard	Telephone	OFFICE/DAMAGE	ASSESSOR/GUIDE		
Rena Knight	Telephone				
	·		Telephone/Damage		
Joanie Maxwell	Telephone	Jevon Brown	Assessor		
LIN	E CREWS				
Chris Hebert	Assistant Elect Ops Mgr.	PROPANE	OPERATIONS		
Billy Clardy	Crew Leader	Allyson Singletary	Propane Clerk		
Donnie Maxwell	Senior Lineman	Thomas Stanley	Gas Utility Worker		
Bobby Parker	Lineman	NATURAL GAS	<b>OPERATIONS</b>		
Vacant	Lineman	George Speerin	Gas Supervisor		
		Rod Calhoun	Gas Service Tech		
SERV	ICE CREWS				
Al Harris	Senior Lineman	DAY SHIFT	(CONTINUED)		
Dean Montgomery	Lineman		t 6:00 AM		
Justin Beverly	Lineman		Operations		
ĺ	IMC Tech	1	<u>oportune</u>		
Jeff Hindsley		Cedric Mitchell	Service Tech		
Clint Brown	IMC Tech	Ocure witerien	Gervice reen		
Omit Brown					
S	TORES	1			
Donna Fowler (FR)	Stores Supervisor	PROPANE	OPERATIONS		
Randy Moore (FR)	Warehouse Assistant	Dave Pluta	Propane Supervisor		
,	_	James Moore	Propane Operator II		
	<del>-</del>	Jody Montgomery	Gas Utility Worker		
DAMAGE AS	SSESSORS/GUIDE	Susan Beale	Senior Propane Clerk		
Lewis Peacock	Damage Assessor/Guide		SAFETY		
Sarah Davis		Todd Neville	Safety, Training &		
	Damage Assessor/Guide		Compliance		
Jeff Berger	Damage Assessor/Guide				

# 17. <u>EMERGENCY ASSISTANCE LIST</u> up-dated 2-4-15

Company		Contact	Telephone	Available Resources
Southeast Electric Exch	ange	Scott Smith	(404) 233-1188	Crews
			(404) 357-6800 cell	
		Jim Collins	(404) 229-2301 cell	
FPU-Marianna		Lynwood Tanner	(850) 209-3409 cell	Crews, Tree Crews, Support
		Jerry Lewis	(850) 209-8898 cell	
ATT		Marvin Fisher	(904) 727-1544	Engineering
			(904) 403-1894	
		Scott Miller	(904) 407-2569	Engineering
			(904) 238-8263 cell	
Comcast		Mike Jackson	(904) 626-2400	Day contact
			1-855-962-852531HFC	After hours answering serv.
Quantas/Dillard Smi	th	Brian Imsand	(423) 490-2206	Crews
Pike Electric Coop		Barry McCarthy	(912) 258-0645 cell	Crews
		bmccarty@pike.com	(850) 632-5769 home	
Public Service Commis	ssion	Rick Moses (EOC)	(850) 431-6582	Primary contact
			(850) 408-4757 cell	
PSC		Tom Ballinger	(850) 413-6680	Backup contact
Florida Electric Power Coo	rd Group	Stacy Dochoda	(813) 207-7960	Crews
Mastec		Ron Martin VP	(850) 519-0639 cell	Crews
		Cooper Nelson	(850) 519-0664	
C & C Powerline		Rick Springer	(904) 751-6020	Crews
		rick@ccpowerline.c	(904) 759-4703	
Davey		Mike Mittiga	(407) 383-0648 mobile	Tree Crews
Asplundh		Ronnie Collins	(352) 256-2370 cell	Tree Crews
JEA		Dispatcher	(904) 665-7152	Power Supply
LE Myers		Eddie Gibbins	(407) 230-3655	Crews
Vehicle Repairs Assistance				
Ī				
Company	Contact		Telephone	Available Resources
Altec	Bobby Kı	nittel	(352) 303-3894	Service Technician Supervis
Altec	Bobby.kn	ittle@altec.com	1-877-462-5832	
Altec	Matt Lyn	n	(904) 404-6458	Mobile Service Tech
	•		(229) 375-9696	
Dickinson Fleet	Aaron		(321)872-4187	
First Coast Fab.	Chris Wo	lf	(904) 849-7426	Welding And Machine Work
Maudlin International Trucks			(904)509-0012	Truck repairs and Parts
	Steve Bro		(904) 783-9822	Asst. Service Manager
Moeller	George M		(904) 415-2094	Vehicle Repairs and Welding
Napa		is (Manager)	(904) 261-4044	Parts and Tools
Power Pro-Tech	Jimmy Ev		(800) 437 4474	Generator Repairs
Generator & HVAC Service	James Sta		1-800-437-4474	8 <sup>th</sup> and Lime locations
		r	321-274-8578	
	Onsite E	mergency	888-218-0298	780 Amelia Island Pkwy
		•	678-566-2439	•
Tiresoles	Pete Shan		(904) 378-0090	Main Office
	Pat Demi	anenko	Cell (904) 536-6460	Operations Manager

# 18. <u>EMERGENCY STOCK REQUIREMENTS</u>

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	
31-1005	WIRE,#6 CU SD SOLID POLY,TX RISER WIRE	1000	2500	
31-1095	(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	
35-3700	SWITCH,UNDERSLUNG	6	8	
35-3946	SWITCH, INLINE	6	14	
37-1000	CLAMP, DEADEND, #6-#4 AL SERVICE WEDGE	20	181	
37-1000	CLAMP, DEADEND, #2-1/0 AL SERVICE WEDGE	40	88	200
37-1020	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, VISE ACTION #6 CU	100	593	
37-1630	CONN,VISE ACTION #4 CU	100	202	400
37-1640	CONN,VISE ACTION 6 SOL-#2 SOL CU	100	702	300
37-1650	CONN,VISE ACTION 2 SOL-#2 STD CU	100	522	500
37-1660	CONNECT-VISE ACTION 2/0 SOL -1/0 STD CU	100	206	450
37-1670	CONN,VISE 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	
	DEADEND,FULL TENSION,COMP477 AL W/2			
37-1891	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	
	ELBOW,LOAD BREAK TERMINATOR #2			
41-1148	W/TEST POINT	20	64	
41-1150	ELBOW,LOAD BREAK, URD, 2/0 AL,15KV W/TEST POINT	10	34	
41-1150	TERMINATOR,LOAD BREAK 4/0 W/TEST POINT	20	107	
	ŕ			
41-1195	STRAP,MOUNTING,TERMINATOR,#2,2/0 & 4/0	50	67	10
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 EXTENDED SPLICE REPAIR KIT,#2 STR,3M QS	12	OK	
N/S	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
11000 1100	ATTACHMENT,DOWN GUY (POLE PLATE)			
NS 35-1186	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	ОК	
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	ОК	
NS 37-1868	DEADEND,AUTO,SLIDE OPENING WEDGE 4/0-600	50	ОК	
	Transformer, Pad Mount 100 KVA	7	6	
	Transformer, Pad Mount 50 KVA	7	12	
	Transformer, Pad Mount 75 KVA	7	6	

<sup>\*</sup>As of 5/5/10

# 19. TRANSPORTATION AND COMMUNICATION EQUIPMENT

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

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

# 20. CRITICAL CUSTOMER LIST

# A. Hospitals, Clinics, Nursing Homes

Name	Address	Telephone		Contact Person
Baptist Medical Center - Nassau	1700 East Lime St	321-3500 (main)		Wayne Arnold
Care Centers of Nassau	95146 Hendrix	261-5518		Patrick Kennedy
		753-3575 Home		
Quality Health	1625 Lime St	261-0771		Steve Jordan
		225-2351 (Answer s	ervice)	
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 548-180	00	
Savannah Grand	1900 Amelia Trace Ct.	321-0898 C	Cell 206-2774	Renee Stoffel
Home 321-3478				
Osprey Village	76 Osprey Village Dr.	277-3337 x11	Cell 753-2435	Dana Sargent
Jane Adams House	1550 Nectarine St	261-9494	Cell 583-3526	Jeanett Adams

# B. Public Utilities & Major Resorts

Name	Address	Te	lephone	Contact Person
Fernandina Waste Water/V	Vater 1007 South 5 <sup>t</sup>	h St 277-7380 Ext. 22	4 753-1412 (cell)	John Mandrick
Nassau Utilities	5390 First Co.	ast Hwy 530-6450	753-2989	Danny White
		261-9452		After Hours
JEA Dispatch		904-665-7152		
Florida Power and Light		(800) 226-3545		Main Number
Comcast		904-374-7600		
ATT	1910 S. 8 <sup>th</sup> St	727-1544 (904)	403-1894	Marvin Fisher
		407-2569 (904) 2	238-8263(cell)	Scott Miller
AIP – Security		277-5914	491-4445	Alan Barker
Ritz Carlton		277-1100	753-2122 cell	Tom Gagne

# C. Major Disaster Shelters & Hotels

Name	Address	Telephone	Contact Person
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 s	helter 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

Name	Address	Telephone	Contact Person
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

Name	Address	Telephone	Contact Person
WOKV Radio		245-8866	
	Cel	1 718-7503	
WQIK Radio		636-0507	
WAPE Radio		245-8500/01	

# F. Major Food Storage/Processing Facilities

Name	Address	Telephone	Contact Person
Publix Super Market	1421 So. 14th St	277-4911	
Winn Dixie Stores	1722 So. 8th 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

Name	Address	Telephone	Contact Person
Nassau House	1781 Lisa Ave.	277-4244	

# I. Airports

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

# G. News Media

Name	Address	Telephone	Contact Person
Fernandina News Leader		261-3696	Fax 261-3698

# 21. Emergency Telephone List

A.	Telephone Repair AT & T	(904) 403-1894	Marvin Fisher
	Comcast (Cabling & repair)	(904) 238-8263 (904) 626-2400 cell 1-855-962-8525	Scott Miller (Day) Mike Jackson (After hours)
B.	<u>Cell Phones</u> IT	(302) 736-7810	Joe Abba
C.	Jacksonville Electric Authority Dispatcher Dispatcher Supervisor Storm Coordinator  SOC (System Operation Center) SWITCHING ACTIVITY (all)	800-683-5542 (904) 665-4806 (904) 887-1811 (904) 665-7145 (904) 665-7110 (904) 665-4806 (904) 277-1478	Matt Seeley Garry Baker Ricky Erixton TURBINE OPERATOR
D.	Emergency Management Nassau County	(904)548-4980	Bill Estep
E.	Law Enforcement - 911 Nassau County F.B. City	225-0331 277-7342	Sheriff – Bill Leeper City Police Chief – James Hurley
F.	Ambulance - 911		
G.	News Media		
	WJWB-Channel 17 Jacksonville WJXT-Channel 4 Jacksonville WTLV-Channel 12 Jacksonville WTEV-Channel 47 Jacksonville	641-1700 399-4000 633-8808 564-1599	Fax 642-7201 Fax 393-9822 Fax 633-8899 Fax 642-5665
H.	Nassau County Officials Billy Estep Ted Selby - County Manager Nassau County Office Steve Kelly Walter Boatright Danny Leeper George Spicer Pat Edwards	548-0900 530-6010 530-6010	Nassau County EOC Director Nassau County  County Commissioner County Commissioner County Commissioner County Commissioner County Commissioner County Commissioner
I.	Fernandina Beach Officials Johnny Miller – City Mayor Dale Martin - City Manager Ty Silcox - City Fire Chief James Hurley - City Police Chief Johnny Miller Robin Lentz Tim Poynter Len Kreger Roy Smith	(W) 556-3299 (W) 277-7305 or 3 (W) 904-277-7331 (W) 277-7344 556-3299 206-0122 415-6533 432-8389 556-0951	Mayor (City FB) Vice Mayor (City FB) City Commissioner City Commissioner City Commissioner

### J. Public Service Commission

 Director
 (800) 342-3552

 Director
 (850) 413-6802

 Mark Futrell-Director
 (850) 413-6692

### K. Generator Repair

See Emergency Assistance List Section 17.

# L. FPUC NE Substations

 Stepdown
 277-1974

 JL Terry
 277-1973

 AIP
 277-1975

# 22. <u>LOGISTICS</u>

### **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 1st Coast Hwy
Beach Diner	310-3748	2006 South 8th 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: Ice Supply:

City of Fernandina Water Winn Dixie 277-2539 Nantze Springs Water Co. 800-239-7873 Publix 277-4911

Wal Mart 261-5306 (Island) or 261-9410 (Yulee)

Service Stations: Vehicle Repair Facilities:

Flash Foods Store's 261-6563 Continental Auto Truck 904-797-2665 (24/7)

Altec Industries Inc (561) 686-8550 West Palm Beach

## **Rental Equipment**

United Rental (904)404-7471

Flashlights (20 w/batteries): Quantity on hand

Portable AM/FM Radios w/batteries: Walmart (Additional) 261-5306 (Island) or 261-9410 (Yulee)

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

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

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

#### Situation 1:

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

#### Situation 2:

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

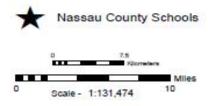
### 24. POST-STORM DATA COLLECTION AND FORENSIC ANALYSIS

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

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

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





US National Grid
100,000-m Square ID
LQ MQ
LP MP
Grid Zone Designation

Grid Zone Designation 17R 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' 48'' To Convert a Grid Azimuth to a Magnetic Azimuth ADD G-M Angle