

State of Florida



Public Service Commission
-M-E-M-O-R-A-N-D-U-M-

DATE: March 11, 2002
TO: Blanca Bayo, Director, Division of Commission Clerk and Administrative Services
FROM: Tim Devlin, Director, Division of Economic Regulation *TD*
RE: Annual Distribution Service Reliability Reports

Please add the following Distribution Reliability Reports for calendar year 2001 to Case Management, Docket Number 020000. The data in these reports are comparable with those in Document Number 07073-01 in Docket Number 010000, which contained the reports for 1997 through 2000. If you have any questions, please let me know. Thank you.

Utility	Data Year	Year Filed (Docket Year)	Document Number
FPC	2001	2002	02254
FPL	2001	2002	None
FPUC	2001	2002	None
GULF	2001	2002	None
TECO	2001	2002	02409

TD/SM:kb

AUS
CAF
CMP
COM
CTR
ECR
GCL
OPC
MMS
SEC
OTH

DOCUMENT NUMBER-DATE

02793 MAR 11 8

FPSC-COMMISSION CLERK



Florida Power

A Progress Energy Company

ASSOCIATE GENERAL COUNSEL

JAMES A. MCGEE

February 26, 2002

Ms. Blanca S. Bayó, Director
Division of the Commission Clerk
and Administrative Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

RECEIVED FPSC
02 FEB 26 PM 12:09
COMMISSION
CLERK

Re: Annual Distribution Service Reliability Report

Dear Ms. Bayó:

Enclosed for filing pursuant to Rule 25-6.0455 are an original and fifteen copies of the subject report for 2001.

Please acknowledge your receipt of the above filing on the enclosed copy of this letter and return to the undersigned. Also enclosed is a 3.5 inch diskette containing the above-referenced document in Word format. Thank you for your assistance in this matter.

Very truly yours,

James A. McGee

JAM/scc
Enclosure

- AUS _____
- CAF _____
- CMP _____
- COM _____
- CTR _____
- ECR _____
- GCL _____
- OPC _____
- MMS _____
- SEC _____
- OTH Done ps

RECEIVED & FILED

FPSC-BUREAU OF RECORDS

DOCUMENT NUMBER - DATE
02254 FEB 26 02
FPSC-COMMISSION CLERK

ANNUAL DISTRIBUTION SERVICE RELIABILITY REPORT for 2001

Florida Power Corporation (Utility)

SAIDI = System Average Interruption Duration Index

$$\frac{\text{Sum of All Customer Minutes Interrupted (CMI)}}{\text{Total number of Customers Served (C)}} = \frac{128,457,951}{1,434,824} = 89.7 \text{ (SAIDI)}$$

CAIDI = Customer Average Interruption Duration Index

$$\frac{\text{Sum of Customer Minutes Interrupted (CMI)}}{\text{Total number of Customer Interruptions (CI)}} = \frac{128,457,951}{1,870,787} = 68.7 \text{ (CAIDI)}$$

SAIFI = System average interruption frequency index.

$$\frac{\text{Total Number of Customer Interruptions (CI)}}{\text{Total Number of Customers Served (C)}} = \frac{1,870,787}{1,434,824} = 1.30 \text{ (SAIFI)}$$

MAIFI_e = Momentary average interruption event

$$\frac{\text{Sum of all Customer Momentary Interruption Events (CME)}}{\text{Total Number of Customers Served (C)}} = \frac{22,526,736}{1,434,824} = 15.7 \text{ (MAIFI_e)}$$

As required by Docket No. 920229-EI, Rule 25-6.0455, interruptions by cause are listed below.

CAUSE	OVERHEAD	UNDERGROUND	UNDETERMINED	TOTAL
Lightning	4,119	366	0	4,485
Other Weather	2,894	240	0	3,134
Vegetation	5,713	215	4	5,932
Animal	4,986	586	11	5,583
Vehicle	410	59	3	472
Dig-in	105	679	2	786
Unknown	4,197	568	179	4,944
Other *				
Transformer	2,014	412	616	3,042
UG primary cable	405	2,374	4	2,783
UG sec/service	359	2,377	3	2,739
All Remaining Outages	3,496	1,001	542	5,039
Total	28,398	8,877	1,364	38,939

* Next 3 highest causes

$$\text{L Bar} = \frac{\text{Minutes of Interruption}}{\text{Total Number of Outages}} = \frac{4,283,290}{38,939} = 110$$

DOCUMENT NUMBER-DATE

02254 FEB 26 8

FPSC-COMMISSION CLERK

3% Worst Performing Feeders

Feeder	Substation	Res Cust	Comm Cust	Ind Cust	S/L Cust	Govt Cust	# N	LBAR
W1108	Deland East	2188	176	1		16	7	45
K857	Shingle Creek	1763	37		1	11	7	44
A216	Twin County Ran	1160	62				5	87
K2246	Hemple	1197	102		9	15	5	49
A321	Weirsdale	1011	105	2		8	4	283
A51	McIntosh	1232	195	2		33	4	126
W0174	Oviedo	1755	216			16	4	116
A34	Reddick	1330	218			9	4	100
W0320	Econ	3448	196		4	10	4	75
K781	Islesworth	1173	254		3	18	4	72
W0214	Narcoossee	1470	55			9	4	63
M412	Lockhart	1866	164	5	3	26	4	59
K58	Lake Wales	1300	299		1	45	4	53
A15	High Springs	1406	364	5		41	4	40
W1103	Deland East	2052	107			11	4	34
C208	Port Richey Wes	2517	553	1	1	41	4	28
J146	Cross Bayou	1187	623	72	1	8	4	27
J555	Walsingham	2737	268		1	13	4	27
K931	Sand Lake		1			2	3	245
W0630	Holopaw	633	57			1	3	212
A35	Reddick	631	160	6		11	3	192
K1885	Lake of the Hil	657	124	1		3	3	116
N4	Madison	371	36	4		13	3	75
W0392	Pinycastle	1796	99		1	16	3	63
W1106	Deland East	1149	129			11	3	61
W1012	UCF	3460	181			15	3	57
C156	Denham	1731	242		1	41	3	50
J143	Cross Bayou	742	56	5	1	5	3	45
W0924	Winter Park Eas	2091	101			46	3	44
M1749	North Longwood	1795	92		1	27	3	43
J690	Ulmerton West	1993	135	1	2	20	3	42
N64	Waukeenah	540	80	1	1	8	3	39
K909	Vineland	1698	81	3		15	3	35

Florida Power Corporation**Summary FPSC Reliability Data****1/1/01 through 12/31/01****SAIDI** - System Average Interruption Duration Index

$$**SAIDI = 89.7**$$

CAIDI - Customer Average Interruption Duration Index

$$**CAIDI = 68.7**$$

SAIFI - System Average Interruption Frequency Index

$$**SAIFI = 1.30**$$

MAIFI_E - Momentary Average Interruption Frequency Index by Event

$$**MAIFI_E = 15.7**$$

CEMI5 - Percentage of customers who experience more than five outages

$$**CEMI = 1.81%**$$



March 1, 2002

Mr. Joseph D. Jenkins, Assistant Director
Division of Economic Regulation
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Dear Mr. Jenkins,

Enclosed are the original and five (5) copies of Florida Power & Light Company's (FPL) Annual Distribution Reliability Report for calendar year 2001.

Pursuant to Rule 25-6.0455, and consistent with the information previously agreed to, the following is provided:

- 1) SAIDI, CAIDI, SAIFI, MAIFIe, N, L-bar, (Attachment 1).
- 2) A list of the number of interruptions by causes and service type (Attachment 1).
- 3) The percent of customers experiencing more than five interruptions in 2001 (Attachment 1).
- 4) Three percent of FPL's feeders with the highest number of feeder breaker interruptions for 2001 (Attachment 2).

For the fourth consecutive year, FPL's SAIDI, the most comprehensive reliability indicator, has improved.

If you have any questions, please do not hesitate to call me at (850) 521-3900.

Sincerely,

A handwritten signature in black ink, appearing to read "William H. Feaster", written over a horizontal line.

William H. Feaster
Manager, Regulatory Affairs

cc: Blanca Bayo

ANNUAL DISTRIBUTION RELIABILITY REPORT 2001

Attachment 1

Florida Power & Light

SAIDI = System Average Interruption Duration Index

$$= \frac{\text{Sum of All Customer Minutes Interrupted (CMI)}}{\text{Total number of Customers Served (C)}} = \frac{268,413,331}{3,886,995} = 69.1$$

CAIDI = Customer Average Interruption Duration Index

$$= \frac{\text{Sum of All Customer Minutes Interrupted (CMI)}}{\text{Total number of Customers Interruptions (CI)}} = \frac{268,413,331}{4,745,632} = 56.6$$

SAIFI = System Average Interruption Frequency Index

$$= \frac{\text{Total Number of Customer Interruption (CI)}}{\text{Total Number of Customers Served (C)}} = \frac{4,745,632}{3,886,995} = 1.22$$

MAIFIe= Momentary Average Interruption Event

$$= \frac{\text{Sum of All Customer Momentary Interruption Events (CME)}}{\text{Total of Customers Served (C)}} = \frac{42,600,388}{3,886,995} = 10.96$$

L BAR = Minutes of Interruption
Total Number of Outages

$$= \frac{13,559,254}{87,927} = 154$$

As required by Docket No. 920229-EL, Rule 25-6.0455, Interruptions by cause are listed below

Causes	Overhead	Underground	Undetermined	Total
Lightning	4,364	649	-	5,013
Other Weather	7,683	906	-	8,589
Vegetation	12,684	733	-	13,417
Animal	7,600	1,156	-	8,756
Vehicle	1,340	231	-	1,571
Dig-in	0	832	-	832
Unknown	16,225	11,598	-	27,823
Other*	-	-	-	-
Other**	12,431	6,717	-	19,148
Corrosion	1,242	398	-	1,640
Salt Spray Corrosion	359	79	-	438
Total	64,505	23,422	-	87,927

* List the next 3 highest causes for the Utility Report

** Other is equal to all causes not part of the FPSC causes reflected above

% Of Customers Experiencing >5 Interruptions = 2.4%

ANNUAL DISTRIBUTION RELIABILITY REPORT 2001

Attachment 2

Florida Power & Light

3% Worst Performing Feeders

Feeder	Substation	Address	RES	COM	IND	Total	N	Lbar
401764	OLYMPIA	13400 POWERLINE RD.	1960	133	1	2094	11	50
405266	ACME	11150 ACME RD.	3036	347	0	3383	8	61
408462	ADAMS SUB	12200 ORANGE AVE.	326	189	0	515	7	135
504967	GOLDEN GATE	4001 15 AVE.	3497	194	0	3691	7	70
706265	VALENCIA 23KV	13000 SW 20 ST.	2517	122	1	2640	7	34
808632	BRANDON	15100 NW 7 AVE.	1722	178	1	1901	6	177
401434	WHITE CITY	641 WEATHERBEE RD.	916	185	4	1105	6	137
706264	VALENCIA 23KV	13000 SW 20 ST.	920	240	1	1161	6	97
801035	NORMANDY	9801 CRYSTAL SPRINGS RD. (JACKSONVILLE ELECTRIC AUTH.)	1419	177	0	1596	6	93
706964	CHAPEL 23KV	Ishoway Pass & SW 195 Tr.	2316	158	2	2476	6	78
801839	BISCAYNE	12635 NW 5 AVE.	2481	161	0	2642	6	60
707263	FLAMINGO	Flamingo Rd	2558	95	7	2660	6	54
808269	LINDGREN	8121 SW 137 AVE.	3636	207	1	3844	6	19
408861	ABERDEEN SUB.	7520 JOG RD.	3723	172	0	3895	5	302
808436	SNAKE CREEK	3875 NW 203 ST.	2300	48	0	2348	5	223
201134	PATRICK (ML)	S/O PATRICK AFB ON SR 3	1077	38	0	1115	5	164
806436	HAINLIN	SW 147 AVE. & 216 ST.	273	154	0	427	5	161
202831	CLEARLAKE (CO)	33 DORA AVE.	1909	198	3	2110	5	127
207262	CHULUOTA (SN)	695 BRUMLEY RD., CHULUOTA	2096	186	0	2282	5	113
801139	FRONTON	3795 NW 38 AVE.	943	392	1	1336	5	91
805236	NATOMA	2475 SW 16 CT.	1485	123	0	1608	5	89
101934	EDGEWATER (DY)	901 16 ST.	1793	316	1	2110	5	88
408664	HOMELAND	1113 WINDSOR LAKE RD., W.P.B	1495	264	1	1760	5	81
503965	ESTERO	4750 BROADWAY WEST	3600	154	1	3755	5	81
404234	BOCA TEECA	601 W. CLINTMORE RD.	2164	80	0	2244	5	77
807931	MIAMI LAKES	14501 NW 77 AVE.	552	52	1	605	5	70
800846	RAILWAY SOUTH	523 NW 11 ST.	7	91	4	102	5	63
704567	MALLARD 23KV	8300 BLOCK OF SOUTHGATE BLVD.	2848	181	0	3029	5	41
701134	LYONS 13KV	900 SE 15 ST.(MCNAB RD.)	1415	80	1	1496	5	38
408164	ROSS	4948 DONALD ROSS RD.	1931	108	0	2039	5	34
407163	CRANE	4000 SW SANDY TR.	2701	156	0	2857	5	33
805732	GALLOWAY	8850 SW 68 ST.	673	63	0	736	5	28
807164	PENNSUCO	10800 NW 107 AVE.	1023	123	1	1147	5	23
803633	SEABOARD	8175 NW 37 AVE.	250	186	2	438	4	260
700335	PINEHURST	2101 SW 9 AVE.	1409	290	0	1699	4	231
704262	IMAGINATION 23KV	E/O SW 160 AVE. ON 45 ST.	567	43	0	610	4	211
809765	SWEETWATER	13655 NW 6 ST.	2299	190	1	2490	4	205
101136	ORMOND (DY)	4400 STERTHUASE DR.	1157	162	0	1319	4	197
800240	MIAMI BEACH	EAST END OF MCARTHUR CSWY.	1112	43	1	1156	4	188
806033	GOLDEN GLADES	16700 NW 19 AVE.	1471	62	0	1533	4	168
802831	ARCH CREEK	12681 NE 14 AVE.	869	153	2	1024	4	166
811561	KOGER	82nd Ave & 62nd St NW	0	1257	7	1264	4	158
204062	DELTONA (SN)	1960 HOWLAND BLVD.	3047	94	2	3143	4	153
100532	MC MEEKIN (PL)	W/O SR 21 ON SR 20A	158	8	0	166	4	150
701436	PORT 13KV	SE 14 AVE. & ELLER DR.	83	213	4	300	4	150
704462	FASHION 23KV	1650 NE 26 ST.	0	98	3	101	4	150

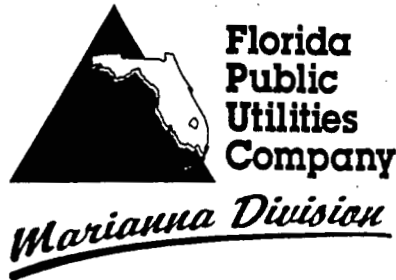
ANNUAL DISTRIBUTION RELIABILITY REPORT 2001

Attachment 2

Florida Power & Light

3% Worst Performing Feeders

Feeder	Substation	Address	RES	COM	IND	Total	N	Lbar
400934	BELLE GLADE	741 NW AVE. "L"	1185	292	1	1478	4	141
810062	AVOCADO	SW 197 AVE. & 216 ST.	985	277	0	1262	4	141
503132	SOLANA	1405 SOLANA RD.	2443	296	0	2739	4	122
503636	EDISON	5813 WINKLER RD.	1801	245	0	2046	4	113
804236	PERRINE	10700 EUREKA DR.	1472	366	1	1839	4	111
507262	SAN CARLOS	7501 ALICO RD.	3162	271	0	3433	4	109
405333	BEELINE SUB	5101 SR 710	938	266	1	1205	4	108
102362	SAINT JOE (DY)	N/O ST. JOE RD. ON OLD KINGS HGWY.	2474	76	1	2551	4	103
400337	NORTHWOOD	9604 5 ST.	954	223	2	1179	4	95
408661	HOMELAND	1113 WINDSOR LAKE RD., W.P.B	2220	404	2	2626	4	93
800234	MIAMI BEACH	EAST END OF MCARTHUR CSWY.	897	22	1	920	4	93
203433	MICCO (ML)	5500 MICCO RD. (W/O US 1)	1986	221	1	2208	4	86
404239	BOCA TEECA	601 W. CLINTMORE RD.	2085	94	2	2181	4	86
100137	DAYTONA BEACH	132 N. SEAGRAVE ST.	1722	333	0	2055	4	84
809033	AVENTURA	2625 NE 206 ST.	1080	31	0	1111	4	84
207062	COX	880 COX RD.	2097	322	0	2419	4	80
800233	MIAMI BEACH	EAST END OF MCARTHUR CSWY.	259	134	0	393	4	80
807163	PENNSUCO	10800 NW 107 AVE.	87	346	4	437	4	80
700435	OAKLAND PARK 13KV	NE 38 ST. & 5 AVE.	258	90	0	348	4	79
404836	GERMANTOWN	1600 SW 10 ST.	2040	299	0	2339	4	78
700531	POMPANO 13KV	POWERLINE RD. & HAMMONDVILLE RD.	2254	195	3	2452	4	78
501066	FRUITVILLE 23KV	611 BELL RD.	1370	260	0	1630	4	71
703632	PALM AIRE 13KV	6275 NW 31 AVE.	2694	52	0	2746	4	71
102033	BULOW (DY)	JOHN ANDERSON HGWY. & N. WASHINGTON AVE	2159	79	0	2238	4	68
811064	PALMETTO SUB	6625 W 22ND CT.	2478	758	1	3237	4	68
201734	SYKES CREEK (CO)	970 MERRITT CSWY.	1461	124	1	1586	4	58
504368	PINE RIDGE	7100 GOODLETE FRANK RD.	4240	365	1	4606	4	58
101936	EDGEWATER (DY)	901 16 ST.	1634	94	1	1729	4	52
808533	SEMINOLA	W. 5 AVE. & 20 ST.	936	151	0	1087	4	49
100233	ST AUGUSTINE	RIBERA ST. & SAN SEBASTIAN RIVER	1042	342	1	1385	4	48
202232	MIMS (CO)	3528 SR 46 (2 MI. W/O US 1)	1565	120	0	1685	4	45
505661	ROTONDA 23KV	149 BOUNDRY BLVD.	3880	152	1	4033	4	45



P. O. Box 610
 Marianna, Florida 32447

March 7, 2002

Joe Jenkins
 Division of Economic Regulation
 Florida Public Service Commission
 2540 Shumard Oak Blvd.
 Tallahassee, Fl. 32399-0868

02 MAR -8 PM 12:39
 ECONOMIC REGULATION
 RECEIVED

Dear Mr. Jenkins:

Attached are the Annual Distribution Service Reliability Reports for Florida Public Utilities Company. These reports are submitted in accordance with Section 25-6.0455 of the Florida Public Service Commission Rules and Regulations.

The report contains the information for combined indicators for Florida Public Utilities Company and separate indicators for the Marianna and Fernandina Beach Divisions. Should you have any questions, please contact me in Marianna at (850)526-6811 or Mario Lacaci in Fernandina Beach at (904)277-2957.

Sincerely,

P. Mark Cutshaw
 P. Mark Cutshaw
 Director, Northwest Florida

cc: Chuck Stein
 Mario Lacaci
 Don Myers
 John Mandrick
 Louie Johnson

ANNUAL DISTRIBUTION RELIABILITY REPORT 2001

FLORIDA PUBLIC UTILITIES COMPANY - FLORIDA PUBLIC UTILITIES COMPANY

SAIDI=System Average Interruption Duration Index

$$\frac{\text{=Sum of All Customer Minutes Interrupted (CMI)}}{\text{Total number of Customers Served (C)}} = \frac{2,173,979}{26,011} = \frac{83.58}{(\text{SAIDI})}$$

CAIDI=Customer Average Interruption Duration Index

$$\frac{\text{=Sum of Customer Minutes Interrupted (CMI)}}{\text{Total number of Customer Interruptions (CI)}} = \frac{2,173,979}{28,594} = \frac{76.03}{(\text{CAIDI})}$$

SAIFI=System Average Interruption Frequency Index

$$\frac{\text{Total Number of Customer Interruptions (CI)}}{\text{Total number of Customers Served (C)}} = \frac{28,594}{26,011} = \frac{1.10}{(\text{SAIFI})}$$

MAIFI=Momentary Average Interruption Event

$$\frac{\text{Sum of All Customer Momentary Interruption Events (CME)}}{\text{Total Number of Customers Served (C)}} = \frac{\text{Not Available}}{\text{N/A}} = \frac{\text{N/A}}{(\text{MAIFI})}$$

As required by Docket No. 920229-EI, Rule 2-6.0455, interruptions by cause are listed below.

CAUSE	OVERHEAD	UNDERGROUND	UNDETERMINED	TOTAL
Lightning	176	1	0	177
Other Weather	37	0	0	37
Vegetation	180	5	0	185
Animal	144	1	0	145
Vehicle	11	1	0	12
Dig-in	0	2	0	2
Unknown	88	3	0	91
Other*				
1 Transformer Failure	28	3	0	31
2 Corrosion	43	11	0	54
3 Cut-out Failure	17	0	0	17
All Remaining Other	26	3	0	29
Total	750	30		780

*List the next 3 highest causes for the Utility Reporting

** Customer cut tree on line.

$$\text{L Bar} = \frac{\text{Minutes of Interruption}}{\text{Total Number of Outages}} = \frac{54,240}{780} = 69.54$$

ANNUAL DISTRIBUTION RELIABILITY REPORT 2001

FLORIDA PUBLIC UTILITIES COMPANY - FLORIDA PUBLIC UTILITIES COMPANY

3% Worst Performing Feeders

<u>Feeder #</u>	<u>Substation</u>	<u>Address</u>	<u>Res Cust #</u>	<u>Com Cust #</u>	<u>Ind Cust #</u>	<u>Total Cust #</u>	<u>N</u>	<u>L Bar</u>
9872	Marianna	Mar.-N.W.	321	84	0	405	3	45.66
211	J L Terry	N/A	1250	50	0	1300	2	25.00

ANNUAL DISTRIBUTION RELIABILITY REPORT 2001

FLORIDA PUBLIC UTILITIES COMPANY - MARIANNA DIVISION

SAIDI=System Average Interruption Duration Index

$$\frac{\text{Sum of All Customer Minutes Interrupted (CMI)}}{\text{Total number of Customers Served (C)}} = \frac{541,925}{12,198} = \frac{44.43}{(\text{SAIDI})}$$

CAIDI=Customer Average Interruption Duration Index

$$\frac{\text{Sum of Customer Minutes Interrupted (CMI)}}{\text{Total number of Customer Interruptions (CI)}} = \frac{541,925}{11,831} = \frac{45.81}{(\text{CAIDI})}$$

SAIFI=System Average Interruption Frequency Index

$$\frac{\text{Total Number of Customer Interruptions (CI)}}{\text{Total number of Customers Served (C)}} = \frac{11,831}{12,198} = \frac{0.97}{(\text{SAIFI})}$$

MAIFI=Momentary Average Interruption Event

$$\frac{\text{Sum of All Customer Momentary Interruption Events (CME)}}{\text{Total Number of Customers Served (C)}} = \frac{\text{Not Available}}{\text{N/A}} = \frac{\text{N/A}}{(\text{MAIFI})}$$

As required by Docket No. 920229-EI, Rule 2-6.0455, interruptions by cause are listed below.

CAUSE	OVERHEAD	UNDERGROUND	UNDETERMINED	TOTAL
Lightning	151	0	0	151
Other Weather	37	0	0	37
Vegetation	73	0	0	73
Animal	105	0	0	105
Vehicle	8	0	0	8
Dig-in	0	1	0	1
Unknown	83	0	0	83
Other*				
1 Transformer Failure	15	0	0	15
2 Cut-Out Failure	17	0	0	17
3 Arrestor Failure	5	0	0	5
All Remaining Outages	11	1	0	12
Total	505	2	0	507

*List the next 3 highest causes for the Utility Reporting

$$\text{L Bar} = \frac{\text{Minutes of Interruption} = n}{\text{Total Number of Outages}} = \frac{28069}{507} = 55.36$$

ANNUAL DISTRIBUTION RELIABILITY REPORT 2001

FLORIDA PUBLIC UTILITIES COMPANY - MARIANNA DIVISION

3% Worst Performing Feeders

<u>Feeder #</u>	<u>Substation</u>	<u>Address</u>	<u>Res Cust #</u>	<u>Com Cust #</u>	<u>Ind Cust #</u>	<u>Total Cust #</u>	<u>N</u>	<u>L Bar</u>
9872	Marianna	Mar. N.W.	321	84	0	405	3	45.66

ANNUAL DISTRIBUTION RELIABILITY REPORT 2001

FLORIDA PUBLIC UTILITIES COMPANY - FERNANDINA BEACH DIVISION

SAIDI=System Average Interruption Duration Index

$$\frac{\text{Sum of All Customer Minutes Interrupted (CMI)}}{\text{Total number of Customers Served (C)}} = \frac{1,632,054}{13,813} = \frac{118.15}{(\text{SAIDI})}$$

CAIDI=Customer Average Interruption Duration Index

$$\frac{\text{Sum of Customer Minutes Interrupted (CMI)}}{\text{Total number of Customer Interruptions (CI)}} = \frac{1,632,054}{16,763} = \frac{97.36}{(\text{CAIDI})}$$

SAIFI=System Average Interruption Frequency Index

$$\frac{\text{Total Number of Customer Interruptions (CI)}}{\text{Total number of Customers Served (C)}} = \frac{16,763}{13,813} = \frac{1.21}{(\text{SAIFI})}$$

MAIFI=Momentary Average Interruption Event

$$\frac{\text{Sum of All Customer Momentary Interruption Events (CME)}}{\text{Total Number of Customers Served (C)}} = \frac{\text{Not Available}}{\text{N/A}} = \frac{\text{N/A}}{(\text{MAIFI})}$$

As required by Docket No. 920229-EI, Rule 2-6.0455, interruptions by cause are listed below.

CAUSE	OVERHEAD	UNDERGROUND	UNDETERMINED	TOTAL
Lightning	25	1	0	26
Other Weather	0	0	0	0
Vegetation	107	5	0	112
Animal	39	1	0	40
Vehicle	3	1	0	4
Dig-In	0	1	0	1
Unknown	5	3	0	8
Other*				
1 Transformer Failure	13	3	0	16
2 Corrosion	43	11	0	54
3 Salt Spray	5	0	0	5
All Remaining Other	5	2	0	7
Total	245	28		273

*List the next 3 highest causes for the Utility Reporting

$$\text{L Bar} = \frac{\text{Minutes of Interruption}}{\text{Total Number of Outages}} = \frac{26,171}{273} = 95.86$$

ANNUAL DISTRIBUTION RELIABILITY REPORT 2001

FLORIDA PUBLIC UTILITIES COMPANY - FERNANDINA BEACH DIVISION

3% Worst Performing Feeders

<u>Feeder #</u>	<u>Substation</u>	<u>Address</u>	<u>Res Cust #</u>	<u>Com Cust #</u>	<u>Ind Cust #</u>	<u>Total Cust #</u>	<u>N</u>	<u>L Bar</u>
211	J L Terry	N/A	1250	50	0	1300	2	25.00

One Energy Place
Pensacola, Florida 32520

Tel 850.444.6111

GULF 2001

RECEIVED
GULF POWER
COMMUNICATIONS

FEB 25 10:49

REGULATION



February 21, 2002

Mr. Joseph Jenkins
Division of Economic Regulation
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee FL 32399-0868

Dear Mr. Jenkins:

Attached is Gulf Power Company's Annual Distribution Service Reliability Report as required by Rule 25-6.0455.

Sincerely,

A handwritten signature in cursive script that reads "Susan D. Ritenour".

Susan D. Ritenour
Assistant Secretary and Assistant Treasurer

lw

Attachment

ANNUAL DISTRIBUTION RELIABILITY REPORT 2001

GULF 2001

Gulf Power Company

SAIDI = System Average Interruption Duration Index

$$= \frac{\text{Sum of All Customer Minutes Interrupted (CMI)}}{\text{Total number of Customers Served (C)}} = \frac{29,575,702}{376,520} = 78.55 \text{ (SAIDI)}$$

CAIDI = Customer Average Interruption Duration Index

$$= \frac{\text{Sum of Customer Minutes Interrupted (CMI)}}{\text{Total number of Customer Interruptions (CI)}} = \frac{29,575,702}{340,086} = 86.97 \text{ (CAIDI)}$$

SAIFI = System average interruption frequency index.

$$\frac{\text{Total Number of Customer Interruptions (CI)}}{\text{Total Number of Customers Served (C)}} = \frac{340,086}{376,520} = .903 \text{ (SAIFI)}$$

MAIFI_e = Momentary average interruption event

$$\frac{\text{Sum of all Customer Momentary Interruption Events (CME)}}{\text{Total Number of Customers Served (C)}} = \frac{3,693,159}{376,520} = 9.809 \text{ (MAIFI_e)}$$

As required by Docket No. 920229-EI, Rule 25-6.0455, interruptions by cause are listed below.

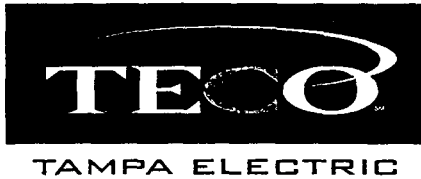
CAUSE	OVERHEAD	UNDERGROUND	UNDETERMINED	TOTAL
Lightning	1557	72		1629
Other Weather	91	1		92
Vegetation	1162	4		1166
Animal	3957	47		4004
Vehicle	173	34		207
Dig-in	10	107		117
Unknown	810	113		923
Other*				
1 Deterioration	990	553		1543
2 Overload	171	29		200
3 Contamination/Corrosion	47	13		60
All Remaining Outages	276	42		318
Total	9244	1015		10,259

$$\text{L Bar} = \frac{\text{Minutes of Interruption}}{\text{Total Number of Outages}} = \frac{1,038,823}{10,259} = 101.26$$

% Of Customers Experiencing >5 Interruptions = 1.0%

3% Worst Performing Feeders

<u>Feeder #</u>	<u>Substation</u>	<u>Address</u>	<u>Res</u> <u>Cust #</u>	<u>Com</u> <u>Cust #</u>	<u>Ind</u> <u>Cust #</u>	<u>Total</u> <u>Cust #</u>	<u>N</u>	<u>L Bar</u>
6774	Brentwood	Pensacola, Fl. 600 Michigan Avenue	760	215	-	975	4	93.3
6042	Beach Haven	Pensacola, Fl. 1615 Blakely Avenue	1738	150	-	1888	3	110.0
7352	Eastgate	Pensacola, Fl. 7201 Lanier Avenue	2301	57	-	2358	3	28.3
9828	Laurel Hill	Laurel Hill, Fl. 7902 T Steel Mill Creek	153	34	-	187	3	153.7
8202	Greenwood	Panama City, Fl. 2002 Lisenby Avenue	1584	253	-	1837	3	57.0
9142	Destin	Destin, Fl. 206 Main Street	1318	212	-	1530	2	19.0
6632	Goulding	Pensacola, Fl. 100 Crescent Drive	625	91	-	716	2	100.0
8122	Hathaway	Panama City Beach, Fl. 6418 Pine Drive	980	144	-	1124	2	81.0



March 1, 2002

Ms. Blanca Bayo, Director
Division of Commission Clerk
& Administrative Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: Florida Administrative Code, Rule 25-6.0455, Annual Distribution Service Reliability Report

Dear Ms. Bayo:

Pursuant to Florida Administrative Code Rule 25.6-0455, enclosed for filing are the original and fifteen (15) copies of Tampa Electric Company's Distribution Service Reliability Report for 2001.

If you have any questions, please call me at (813) 228-1752.

Sincerely,

Angela L. Llewellyn
Administrator
Regulatory Affairs

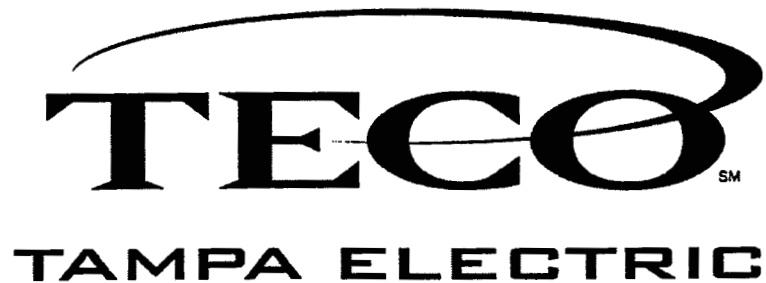
Enclosure

cc: J. D. Beasley (w/enclosure)

DOCUMENT NUMBER - DATE

02409 MAR -18

FPSC-COMMISSION CLERK



2001 DISTRIBUTION SERVICE
RELIABILITY REPORT
TO THE
FLORIDA PUBLIC SERVICE COMMISSION
AS DESCRIBED IN RULE 25-6.0455

DISTRIBUTION INTERRUPTIONS
BY
CATEGORY

ANNUAL DISTRIBUTION RELIABILITY REPORT 2001

Tampa Electric

SAIDI = System Average Interruption Duration Index	=			
=		<u>Sum of All Customer Minutes of Interruption (CMI)</u>	=	<u>27,908,645</u>
		Total number of Customers Served (C)		605,058
				46.13 (SAIDI)
CAIDI = Customer Average Interruption Duration Index				
=		<u>Sum of All Customer Minutes of Interruption (CMI)</u>	=	<u>27,908,645</u>
		Total number of Customers Interrupted (CI)		557,119
				50.09 (CAIDI)
SAIFI = System Average Interruption Frequency Index				
=		<u>Total number of Customers Interrupted (CI)</u>	=	<u>557,119</u>
		Total number of Customers Served (C)		605,058
				0.92077 (SAIFI)
MAIFle = Momentary Average Interruption Event				
=		<u>Sum of All Customer Momentary Interruption Events (CME)</u>	=	<u>9,263,438</u>
		Total number of Customers Served (C)		605,058
				15.31 (MAIFle)

As required by Docket No. 920229-EI, Rule 25-6.0455, interruptions by cause are listed below.

Cause	Overhead	Underground	Undetermined	Total
Lightning	2,070	233		2,303
Other Weather	635	77		712
Vegetation	1,099	26		1,125
Animals	1,813	95		1,908
Vehicle	210	48		258
Dig-In	NA	22		22
Unknown	1,382	216		1,598
Other				
1 Defective Equipment	443	70		513
2 Down Pole/Wire	482	164		646
3 Bad Connection	315	96		411
All Remaining Outages	352	137		489
Total	8,801	1,184		9,985

* List the next 3 highest causes for the Utility Reporting.

L Bar = Minutes of Interruption	=	1,249,323	=	125.12 Minutes
Total Number of Outages		9,985		

TECO 2001

THREE PERCENT
HIGHEST INTERRUPTED
DISTRIBUTION CIRCUITS

2000 - 3% Worst Performing Feeders

Circuit	Substation	Service Area	Residential Customers *	Commercial Customers *	Industrial Customers *	N	L-Bar
13176	11TH AVENUE	CENTRAL	905	155	58	8	35.1
13924	LAKE GUM	WINTER HAVEN	480	99	14	7	34.7
13290	LAKE SILVER	WINTER HAVEN	1,008	98	14	6	19.8
13722	GALLAGHER ROAD	PLANT CITY	542	162	30	6	51.3
13139	HABANA	WESTERN	1,271	180	44	5	37.0
13331	DADE CITY	DADE CITY	953	170	14	5	33.6
13910	PEACH AVENUE	EASTERN	1,313	62	6	5	27.6
14050	POLK POWER	PLANT CITY	479	61	9	5	52.6
13070	KEYSTONE	WESTERN	878	81	7	4	62.3
13155	JACKSON ROAD	WESTERN	1394	130	17	4	3.8
13231	BRANDON	EASTERN	1211	83	9	4	45.4
13292	LAKE SILVER	WINTER HAVEN	548	16	6	4	9.8
13379	PLANT AVENUE	WESTERN	1,067	38	5	4	33.8
13417	JUNEAU	CENTRAL	653	179	35	4	11.3
13538	CARROLLWOOD VILLAGE	WESTERN	703	18	2	4	78.0
13576	SOUTH SEFFNER	EASTERN	1,834	31	2	4	14.5
13770	LAKE JULIANA	WINTER HAVEN	1,162	34	3	4	41.5
13808	KNIGHTS	PLANT CITY	1,730	169	6	4	22.0
13815	BLANTON	DADE CITY	456	69	2	4	35.3
14020	RIVERVIEW	SOUTH HILLSBOROU	903	100	35	4	45.8
13004	FORT KING	DADE CITY	454	69	12	3	58.3

TECO 2001