



**TAMPA ELECTRIC**

March 1, 2005

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 2004.

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)

TAMPA ELECTRIC COMPANY  
P. O. BOX 111 TAMPA, FL 33601-0111

AN EQUAL OPPORTUNITY COMPANY  
[HTTP://WWW.TAMPAELECTRIC.COM](http://www.tampaelectric.com)

(813) 228-4111

CUSTOMER SERVICE:  
HILLSBOROUGH COUNTY (813) 223-0800  
OUTSIDE HILLSBOROUGH COUNTY 1 (888) 223-0800

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2004 DISTRIBUTION SERVICE  
RELIABILITY REPORT  
TO THE  
FLORIDA PUBLIC SERVICE COMMISSION  
AS DESCRIBED IN RULE 25-6.0455

**ANNUAL DISTRIBUTION RELIABILITY REPORT - 2004**

Utility Name: Tampa Electric

<b>SAIDI: System Average Interruption Duration Index</b>		
= <u>Sum of All Customer Minutes Interrupted (CMI)</u>	45,583,413	72.63
Total number of Customers Served (C)	627,620	
 <b>CAIDI: System Average Interruption Duration Index</b>		
= <u>Sum of All Customer Minutes Interrupted (CMI)</u>	45,583,413	75.26
Total number of Customer Interruptions (CI)	605,663	
 <b>SAIFI: System Average Interruption Frequency Index</b>		
= <u>Total number of Customer Interruptions (CI)</u>	605,663	0.97
Total number of Customers Served (C)	627,620	
 <b>MAIFle: Momentary Average Interruption Event</b>		
= <u>Sum of All Customer Momentary Interruption Events (CME)</u>	12,131,948	19.33
Total number of Customers Served (C)	627,620	
 <b>LBar:</b>		
= <u>Minutes of Interruption</u>	1,966,431	178.07
Total number of Outages	11,043	

District	C	CMI	CI	CME	# Cust > 5
Central	171,187	12,268,374	143,226	2,791,781	2,008
Dade City	13,000	2,009,533	25,288	434,408	2,060
Eastern	98,326	7,229,994	100,161	2,032,406	3,511
Plant City	50,032	5,005,819	79,180	1,313,962	7,229
South Hillsborough	49,271	4,213,869	65,553	1,312,365	1,817
Western	182,791	10,459,262	126,975	2,774,812	810
Winter Haven	63,013	4,396,562	65,280	1,472,214	3,252
<b>System Totals</b>	<b>627,620</b>	<b>45,583,413</b>	<b>605,663</b>	<b>12,131,948</b>	<b>20,687</b>

THREE PERCENT  
HIGHEST INTERRUPTED  
DISTRIBUTION CIRCUITS

Utility Name: Tampa Electric													Year: 2004	
Primary Circuit Id. No. or Name (a)	Substation Origin (b)	Location (c)	Number of Customers					Outage Events "N" (i)	Avg. Duration "L-Bar" (j)	CAIDI (k)	Listed Last Year? (l)	Years in the Last 5 (m)	Action Completion Date (n)	
			Residential (d)	Commerical (e)	Industrial (f)	Other (g)	Total (h)							
:B 13388	Kirkland	Plant City	402	29	3		434	9	28.44	28.44	No	1	Infrared Patrol 6/30/05	
:B 13808	Knights	Plant City	1,682	155	9		1,846	7	40.71	40.73	No	1	Infrared Patrol 6/30/05	
:B 13007	Mulberry	Plant City	340	153	61		554	5	45.80	45.24	No	1	Infrared Patrol 9/30/05	
:B 13442	Lake Region	Winter Haven	1,573	55	7		1,635	5	26.80	26.51	No	0	Infrared Patrol 6/30/05; Tree Trim 07/04	
:B 13906	Peach Avenue	Eastern	1,163	156	43		1,362	5	53.40	53.24	No	1	Infrared Patrol 6/30/05	
:B 13910	Peach Avenue	Eastern	934	56	3		993	5	51.00	51.12	Yes	4	Infrared Patrol 6/30/05	
:B 13148	Hopewell	Plant City	663	45	9		717	4	32.75	32.79	No	0	Infrared Patrol 9/30/05; Tree Trim 12/04	
:B 13302	Sun City	South Hillsborough	1,450	34	11		1,495	4	39.25	37.18	No	0	Infrared Patrol 6/30/05	
:B 13310	E. Winter Haven	Winter Haven	282	177	32		491	4	70.50	67.92	No	0	Infrared Patrol 6/30/05	
:B 13576	South Seffner	Eastern	1,549	33	1		1,583	4	45.50	45.48	No	2	Infrared Patrol 9/30/05	
:B 13679	Turkey Ford	Western	979	47	3		1,029	4	32.00	31.45	No	0	Infrared Patrol 6/30/05	
:B 13799	St. Cloud	Eastern	1,400	36	3		1,439	4	44.75	44.75	No	0	Infrared Patrol 9/30/05; Tree Trim 12/04	
:B 13813	Blanton	Dade City	1,175	108	5		1,288	4	23.00	22.42	No	0	Infrared Patrol 6/30/05	
:B 13909	Peach Avenue	Eastern	827	172	33		1,032	4	45.25	45.42	No	0	Infrared Patrol 9/30/05; Tree Trim 12/04	
:B 13927	Lake Gum	Winter Haven	1,493	114	16		1,623	4	91.50	90.97	Yes	2	Infrared Patrol 9/30/05	
:B 14040	Harny Rd	Central	2,046	129	29		2,204	4	55.00	52.51	No	0	Infrared Patrol 6/30/05	
:B 13829	Fowler Avenue	Central	778	60	5		843	3	136.33	171.13	No	0	Infrared Patrol 6/30/05	
:B 13029	Temple Terrace	Central	1,044	76	32		1,152	3	101.33	101.48	No	0	Infrared Patrol 9/30/05	
B 13947	Yukon	Central	1,185	31	7		1,223	3	79.67	79.75	No	0	Infrared Patrol 9/30/05; Tree Trim 12/04	
B 13008	Mulberry	Plant City	333	67	25		425	3	77.67	66.01	No	0	Infrared Patrol 9/30/05	
B 13512	George Road	Western	2,863	188	21		3,072	3	104.67	62.13	No	0	Infrared Patrol 6/30/05	

Form PSC/ECR 102-2, Docket No. 011351-EI, Rule 25-6.0455(b)

Notes:

L-Bar and CAIDI are based on the entire circuit.

L-Bar and CAIDI are expressed in minutes

DISTRIBUTION INTERRUPTIONS  
BY  
CATEGORY

Primary Causes of Outage Events			
Utility Name: Tampa Electric			Year: 2004
Cause (a)	Number of Outages Events (N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)
1. Lightning	2,283	246.02	121.64
2. Animals	2,083	93.31	65.64
3. Vegetation	1,880	201.55	72.96
4. Unknown	1,335	146.11	65.32
5. Electrical	955	179.70	76.53
6. Other Weather	911	187.15	76.78
7. Bad Connection	694	179.18	93.22
8. Vehicle	235	168.87	47.72
9. Human Interference	222	192.81	37.04
10. Defective Equipment	210	207.29	118.24
All Remaining Causes	235	187.00	53.78
<b>System Totals</b>	<b>11,043</b>	<b>178.07</b>	<b>75.26</b>

Form PSC/ECR 102-1, Docket No. 011351-EI, Rule 25-6.0455(a)

Notes:

L-Bar and CAIDI are expressed in minutes.

# SERVICE RELIABILITY INDICES



Service Reliability Indices

Utility Name: Tampa Electric

Year: 2004

District or Service Area (a)	SAIDI (b)	CAIDI (c)	SAIFI (d)	MAIF1e (e)	CEMI5 (f)
Central	71.67	85.66	0.83666	16.31	1.17%
Jade City	154.58	79.47	1.94523	33.42	15.84%
Eastern	73.53	72.18	1.01866	20.67	3.57%
Plant City	100.05	63.22	1.58259	26.26	14.45%
South Hillsborough	85.52	64.28	1.33046	26.64	3.69%
Western	57.22	82.37	0.69465	15.18	0.44%
Winter Haven	69.77	67.35	1.03598	23.36	5.16%
System	72.63	75.26	0.96502	19.33	3.30%

Form PSC/ECR 102-3, Docket No. 011351-EI, Rule 25-6.0455(c)

Notes:

SAIDI and CAIDI are expressed in minutes