

September 17, 2003

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 Revised Distribution Service Reliability Report for 2002, filed March 3, 2003.

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

Sincerely,

Angela L. Llewellyn

Administrator Regulatory Affairs

Enclosure

cc: J. Breman (w/enclosure) J. D. Beasley (w/enclosure) 000UMENT NUMBER - P.A. E 0 8 8 5 1 SEP 17 8 FPSC-CONFISSION OLEPN

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



### TAMPA ELECTRIC

### 2002 DISTRIBUTION SERVICE RELIABILITY REPORT TO THE FLORIDA PUBLIC SERVICE COMMISSION AS DESCRIBED IN RULE 25-6.0455

**REVISED: SEPTEMBER 17, 2003** 

#### **ANNUAL DISTRIBUTION RELIABILITY REPORT - 2002**

Utility Name: Tampa Electric

SAIDI: System Avera = <u>Sum of All Custo</u> Total number of	<u>35.349.788</u> 618,161	57.19							
CAIDI: System Average Interruption Duration Index									
= Sum of All Custo	mer Minutes Inter	rupted (CMI)		<u>35.349.788</u>	60.82				
Total number of	Customer Interrup	otions (CI)		581,220					
SAIFI: System Average Interruption Frequency Index									
= Total number of	<u>581.220</u>	0.94							
Total number of	Customers Serve	d (C)		618,161					
MAIFIe: Momentary A = <u>Sum of All Custo</u> Total number of t	<u>10.244.469</u> 618,161	16.57							
LBar:									
= <u>Minutes of Interru</u>	<u>1.711.803</u>	143.85							
Total number of (	11,900								
District	С	CMI	CI	CME	# Cust > 5				
Central	171,507	7,590,988	123,843	2,164,790	954				
Dade City	13,174	1,160,532	18,562	303,209	42				
Eastern	95,339 5,075,509 77,610		1,704,001	2,242					
Plant City	49,436	3,629,513	61,877	1,137,835	801				
South Hillsborough	43,838	3,472,293	58,673	1,029,476	3,819				
Western	181,194	10,369,950	167,622	2,883,624	3,124				
Winter Haven	63,673	3,683,309	61,766	1,021,518	534				
System Totals	618,161	35,349,788	10,244,469	11,517					

## THREE PERCENT HIGHEST INTERRUPTED DISTRIBUTION CIRCUITS

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3 Percent Feeder List													
Utility Name	: Tampa Electric	<b></b>	Number of Customers					· · · · · ·			Year: 200		
Primary											,		
Circuit	Contractions							Outage	Avg.	1	Listed	Years	Action
kl. No. or Name	Substation Origin	Location	Residential	Commerical	industrial	Other	Total	Events "N"	Duration "L-Ber"	CAIDI	Last Year?	in the Last 5	Completion Date
(2)	(b)	(c)	(d)	(e)	inclusionas (f)	(g)	(h)	6)	(i)	(k)	1920017 ())	(m)	(n)
	Gulf City	South Hillsborough	977	252	9		1,238	7	40.71	40.69	No	1	
and the second se	Sun City	South Hillsborough	1,491	289	31		1.811	7	39.14	39.97	No	0	
	Plant Avenue	Western	975	34	3		1,012	5			Yes	1	
	Rocky Creek	Western	1,225	62	4		1,291	5	30.20		No	1	
13927	Lake Gum	Winter Haven	1,456	115	16		1,587	5	31.60	31.53	No	0	
13003	Ruskin	South Hillsborough	582	148	24		754	4	33.25	33.28	No	1	
	Belmont Heights	Central	967	89			1,079	4	41.50	39.66	No	0	
13175	11th Avenue	Central	1,456	178	36		1,670	4	31.75	31.18	No	0	
	Dade City	Dede City	394	118	25		537	4	52.00		No	0	
	Plant Avenue	Western	1,035				1,162	4	21.25		No	1	
13434	12th Avenue	Eastern	1,335	70	21		1,426	4	26.25	31.49	No	0	
	Wayne Road	Western	1,337	96	21		1,454	4	19.00			0	
	Berkley	Winter Haven	1,164		14		1,316	4	51.00	50.92	No	0	
	Pinecrest	Plant City Eastern	994	70			1,082	4	33.00		No	<u> </u>	
13910	Peech Avenue Mulberry	Plant City	1,248	137			1,307	3	27.00		Yep No		
	Himes	Western	1,285	104	28		1.417	3		43.22	No		
	Plant City	Plant City	754	123	27		904	3		43.31	No	1	j
13444	Lake Region	Winter Haven	552	39	7		598	3	61.00	72.77	No	0	
13756	Granada	Western	1,492	153	21		1,666	3	97.67	97.85	No	Ō	

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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

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## DISTRIBUTION INTERRUPTIONS BY CATEGORY

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Primary Causes of Outage Events								
Utility Name: Tampa Electric Year: 2002								
	Number of Outages	Average Duration	Average Restoration					
Cause	Events (N)	(L-Bar)	Time (CAIDI)					
(a)	(b)	(c)	(d)					
1. Lightning	2,148	190.56	89.84					
2. Animals	2,133	81.18	50.30					
3. Unknown	1,783	124.00	50.03					
4. Vegetation	1,668	158.09	70.90					
5. Electrical	1,125	163.61	61.19					
6. Other Weather	976	147.35	62.10					
7. Bad Connection	752	148.94	82.34					
8. Human Interference	349	145.40	36.68					
9. Vehicle	331	171.39	53.25					
10. Defective Equipment	290	154.31	82.74					
All Remaining Causes	345	151.97	44.41					
System Totals	11,900	143.85	60.82					

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

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Notes:

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L-Bar and CAIDI are expressed in minutes.

# SERVICE RELIABILITY INDICES

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Service Reliability Indices									
Utility Name: Tampa Electric Year: 2002									
District or									
Service Area	SAIDI	CAIDI	SAIFI	MAIFIe	CEMI5				
(a)	(b)	(c)	(d)	(e)	(f)				
Central	44.26	61.30	0.72209	12.62	0.56%				
Dade City	88.09	62.52	1.40899	23.02	0.02%				
Eastern	53.24	65.40	0.81404	17.87	1.31%				
Plant City	73.42	58.66	1.25166	23.02	0.47%				
South Hillsborough	79.21	59.18	1.33841	23.48	2.23%				
Western	57.23	61.87	0.92510	15.91	1.82%				
Winter Haven	57.85	59.63	0.97005	16.04	0.31%				
System	57.19	60.82	0.94024	16.57	1.86%				

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

Notes: SAIDI and CAIDI are expressed in minutes