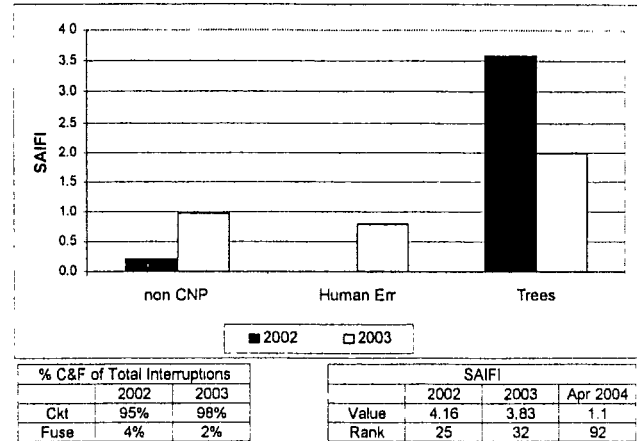


2002-2003 CenterPoint Energy Repeating Circuit Report

Kingwood Ckt 44 (KW44) – 4,576 customers

Repeating Indices: 10% SAIFI

SAIFI



Reliability Expenditures

Year	Service Restoration	Major Equip	Minor Equip	URD Equip	Trees	Poles	Total
2003	\$ 18,631	\$ 1,832	\$ 1,196	\$ 29,417	\$ 99,894	\$ -	\$ 150,971
2004 YTD (5/10/04)	\$ 20,629	\$ 1,330	\$ 3,021	\$ 7,720	\$ 435	\$ -	\$ 33,136

* Reliability expenditures do not reflect analysis/engineering costs.

2003 Reliability Action Items

- 1) Completed root cause analysis to identify interruption sources.
- 2) Detailed circuit inspection completed 1Q 2003.
- 3) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 4) Repaired/replaced equipment as part of Service Restoration Process.
- 5) Circuit tree trimming completed 2/22/03.

2004 Reliability Action Items

- 1) Completed root cause analysis to identify interruption sources.
- 2) Infrared circuit inspection completed on 1/19/04.
- 3) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 4) Repaired/replaced equipment as part of Service Restoration Process.
- 5) Additional sectionalizing capabilities installed to minimize impact of interruptions.
- 6) Localized tree trimming evaluated and completed as necessary.

Notes:

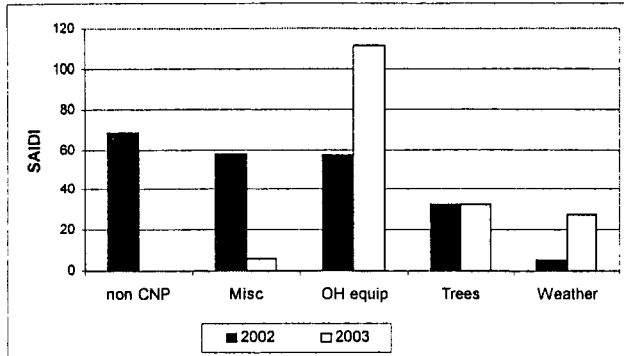
- In the non-CNP category, 26% of yearly SAIFI was due to a circuit level interruption caused by customer owned equipment.
- In the Human Err category, 20% of yearly SAIFI was due to a circuit level interruption that occurred during the Service Restoration Process.

2002-2003 CenterPoint Energy Repeating Circuit Report

Lockwood Ckt 41 (LW41) – 3,607 customers

Repeating Indices: 10% SAIDI, 10% SAIFI

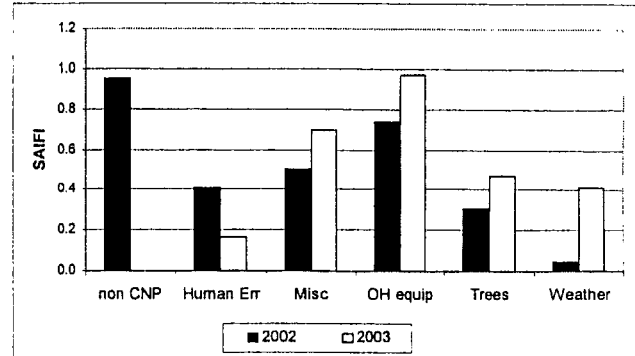
SAIDI



% C&F of Total Interruptions		
	2002	2003
Ckt	85%	75%
Fuse	12%	21%

SAIDI			
	2002	2003	Apr 2004
Value	236.70	196.65	3.99
Rank	119	99	893

SAIFI



% C&F of Total Interruptions		
	2002	2003
Ckt	89%	90%
Fuse	9%	8%

SAIFI			
	2002	2003	Apr 2004
Value	3.07	2.99	0.04
Rank	75	66	869

Reliability Expenditures

Year	Service						
	Restoration	Major Equip	Minor Equip	URD Equip	Trees	Poles	Total
2003	\$ 43,758	\$ 9,275	\$ 119,394	\$ 37,017	\$ 77,554	\$ 3,646	\$ 290,644
2004 YTD (5/10/04)	\$ 20,648	\$ 3,608	\$ 20,301	\$ 28,427	\$ 3,826	\$ -	\$ 76,810

* Reliability expenditures do not reflect analysis/engineering costs.

2003 Reliability Action Items

- 1) Completed root cause analysis to identify interruption sources.
- 2) Detailed circuit inspection completed 3Q 2003.
- 3) Infrared circuit inspection completed on 4/22/03.
- 4) Pole top switch infrared completed on 10/13/03.
- 5) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 6) Repaired/replaced equipment as part of Service Restoration Process.
- 7) Additional sectionalizing capabilities installed to minimize impact of interruptions.
- 8) Installed/repared lightning arrestors to address lightning as the primary root cause for weather related interruptions.
- 9) Localized tree trimming evaluated and completed as necessary.
- 10) Pole maintenance program utilized to identify and replace poles as necessary.

Notes:

- The primary source of non-CNP SAIDI and SAIFI was a circuit level interruption caused by customer owned equipment.
- The primary source of Human Err interruptions was overhead switching errors.
- The primary source of Misc SAIDI and SAIFI was interruptions with unknown causes.

2004 Reliability Action Items

- 1) Completed root cause analysis to identify interruption sources.
- 2) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 3) Repaired/replaced equipment as part of Service Restoration Process.
- 4) Installed/repared lightning arrestors to address lightning as the primary root cause for weather related interruptions.
- 5) Circuit tree trimming scheduled for completion 9/30/04.

Notes:

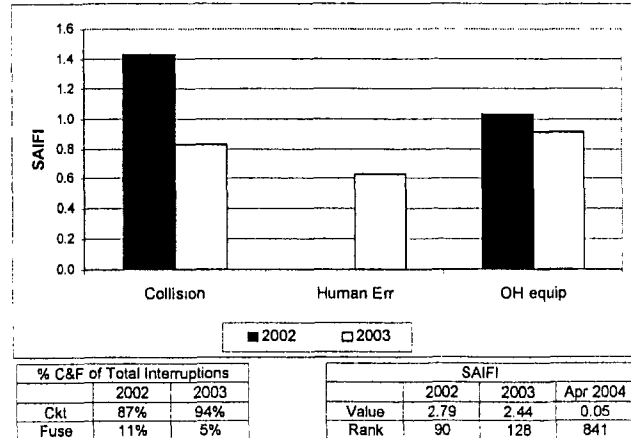
- The primary source of MISC SAIFI was due to construction. Work tags on the circuit resulted in sustained interruptions due to what would have normally been momentary interruptions. The cause of these interruptions is unknown.

2002-2003 CenterPoint Energy Repeating Circuit Report

Lockwood Ckt 42 (LW42) – 3,086 customers

Repeating Indices: 10% SAIFI

SAIFI



Reliability Expenditures

Year	Service						
	Restoration	Major Equip	Minor Equip	URD Equip	Trees	Poles	Total
2003	\$ 50,393	\$ 6,314	\$ 5,321	\$ 4,358	\$ 45,549	\$ -	\$ 111,935
2004 YTD (5/10/04)	\$ 28,838	\$ 802	\$ 16,901	\$ 8,357	\$ 6,423	\$ 3,595	\$ 64,916

* Reliability expenditures do not reflect analysis/engineering costs.

2003 Reliability Action Items

- 1) Completed root cause analysis to identify interruption sources.
- 2) Detailed circuit inspection completed 5/28/03.
- 3) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 4) Infrared circuit inspection completed on 5/7/03.
- 5) Pole top switch infrared completed October 2003.
- 6) Repaired/replaced equipment as part of Service Restoration Process.
- 7) Multiple, random vehicle collisions accounted for approximately 51% of yearly SAIFI. Collision locations were evaluated for opportunities to reduce future potential collisions. Actions taken as necessary.
- 8) Localized tree trimming evaluated and completed as necessary.

2004 Reliability Action Items

- 1) Completed root cause analysis to identify interruption sources.
- 2) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 3) Repaired/replaced equipment as part of Service Restoration Process.
- 4) Single vehicle collision accounted for approximately 34% of yearly SAIFI. Location was evaluated for opportunities to reduce future potential collisions. Actions taken as necessary.
- 5) Localized tree trimming evaluated and completed as necessary.
- 6) Pole maintenance program utilized to identify and replace poles as necessary.

Notes:

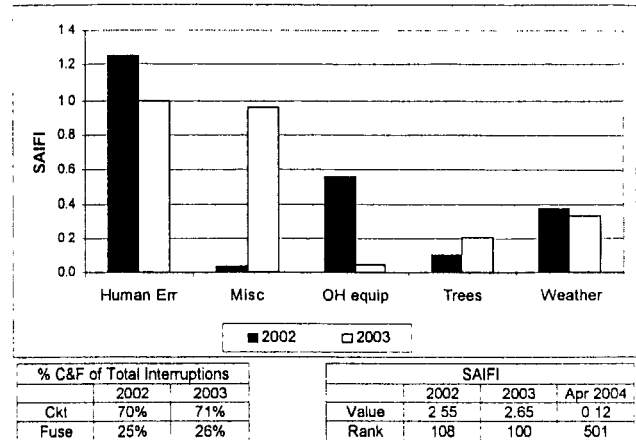
- In the Human Err category, 26% of yearly SAIFI was due to a circuit level interruption that occurred during the Service Restoration Process.

2002-2003 CenterPoint Energy Repeating Circuit Report

Mont Belvieu Ckt 08 (MB08) – 1,186 customers

Repeating Indices: 10% SAIFI

SAIFI



Reliability Expenditures

Year	Service Restoration	Major Equip	Minor Equip	URD Equip	Trees	Poles	Total
2003	\$ 27,952	\$ 1,200	\$ 2,839	\$ 2,014	\$ 177	\$ 2,236	\$ 36,418
2004 YTD (5/10/04)	\$ 21,493	\$ 1,133	\$ 13,254	\$ 776	\$ 268	\$ 77	\$ 37,001

* Reliability expenditures do not reflect analysis/engineering costs.

2003 Reliability Action Items

- 1) Detailed circuit inspection completed 1Q 2003. Additional inspections were conducted as necessary.
- 2) Infrared circuit inspection completed on 10/29/03.
- 3) Repaired/replaced equipment as part of Service Restoration Process.
- 4) Installed/repared lightning arrestors to address primary root cause for weather related interruptions.
- 5) Localized tree trimming evaluated and completed as necessary.
- 6) Pole maintenance program utilized to identify and replace poles as necessary.

Notes:

- In the Human Err category, 10% of yearly SAIFI was due to a momentary operation occurring when a work tag was inadvertently left in place on a recloser. The cause of this operation is unknown.
- In the Human Err category, 39% of yearly SAIFI was due to a construction error.

2004 Reliability Action Items

- 1) Detailed circuit inspection completed 1Q 2004.
- 2) Infrared circuit inspection scheduled for 06/14/04.
- 3) The primary source of Misc SAIFI was interruptions with unknown causes. Detailed circuit inspections will be conducted throughout the year to reduce the number of unknown causes.
- 4) Repaired/replaced equipment as part of Service Restoration Process.
- 5) Installed/repared lightning arrestors to address primary root cause for weather related interruptions.
- 6) Circuit tree trim is scheduled for completion by 7/1/04.

Notes:

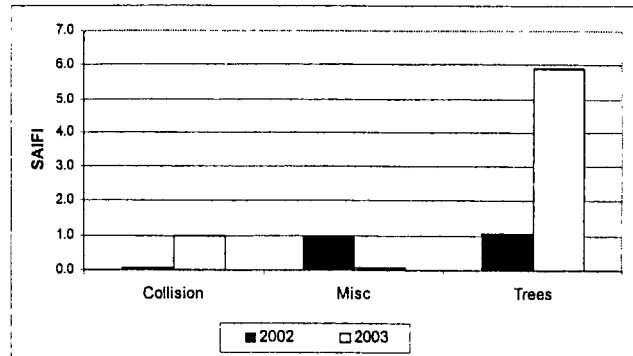
- In the Human Err category, 38% of yearly SAIFI was due to a circuit level interruption caused by a switching error.

2002-2003 CenterPoint Energy Repeating Circuit Report

Newport Ckt 41 (NP41) – 2,574 customers

Repeating Indices: 10% SAIFI

SAIFI



% C&F of Total Interruptions		
	2002	2003
Ckt	87%	97%
Fuse	11%	3%

SAIFI			
	2002	2003	Apr 2004
Value	2.46	8.12	0.13
Rank	119	1	463

Reliability Expenditures

Year	Service						Total
	Restoration	Major Equip	Minor Equip	URD Equip	Trees	Poles	
2003	\$ 56,280	\$ 13,114	\$ 28,150	\$ 55,610	\$ 1,505	\$ 1,025	\$ 155,683
2004 YTD (5/10/04)	\$ 29,834	\$ 10,500	\$ 23,218	\$ 15,465	\$ 121,158	\$ 9,605	\$ 209,779

* Reliability expenditures do not reflect analysis/engineering costs.

2003 Reliability Action Items

- 1) Detailed circuit inspection completed 4Q 2002.
- 2) Completed root cause analysis to identify interruption sources.
- 3) Repaired/replaced equipment as part of Service Restoration Process.
- 4) Repaired/replaced URD spans.
- 5) Added auto-sectionalizing capabilities to existing remote control switches to minimize the impact of interruptions.
- 6) Localized tree trimming evaluated and completed as necessary.
- 7) Pole maintenance program utilized to identify and replace poles as necessary.

Notes:

- In the Misc category, 73% of yearly SAIFI was due to interruptions with unknown causes.

2004 Reliability Action Items

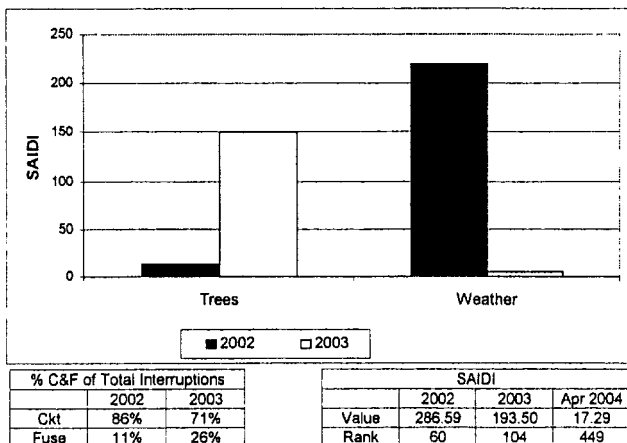
- 1) Detailed circuit inspection completed 1Q 2004.
- 2) Infrared circuit inspection scheduled for 7/1/04.
- 3) Completed root cause analysis to identify interruption sources.
- 4) Repaired/replaced equipment as part of Service Restoration Process.
- 5) Single vehicle collision accounted for approximately 12% of yearly SAIFI. Location was evaluated for opportunities to reduce future potential collisions. Actions taken as necessary.
- 6) Customers trimming trees outside the easements caused two circuit level interruptions. A dead tree falling outside the easement caused an additional circuit level interruption. The remaining interruptions were addressed by circuit tree trimming which was completed 03/26/04.
- 7) Pole maintenance program utilized to identify and replace poles as necessary.

2002-2003 CenterPoint Energy Repeating Circuit Report

Obrien Ckt 42 (OB42) – 3,539 customers

Repeating Indices: 10% SAIDI

SAIDI



Reliability Expenditures

Year	Service Restoration	Major Equip	Minor Equip	URD Equip	Trees	Poles	Total
2003	\$ 766	\$ -	\$ 9,697	\$ 2,639	\$ -	\$ -	\$ 13,102
2004 YTD (5/10/04)	\$ 1,219	\$ -	\$ 930	\$ 405	\$ 1,928	\$ -	\$ 4,482

* Reliability expenditures do not reflect analysis/engineering costs.

2003 Reliability Action Items

- 1) Completed root cause analysis to identify interruption sources. This analysis identified two circuit sections that were incorrectly assigned to OB42. The interruptions associated with these sections accounted for 86% of the OB42 circuit SAIDI. Corrections were made to avoid similar situations in the future.
- 2) Detailed circuit inspection completed 1Q 2003.
- 3) Infrared circuit inspection completed on 05/28/03.
- 4) Repaired/replaced equipment as part of Service Restoration Process.
- 5) Ongoing evaluation of protective device coordination in response to recurring interruption program.

2004 Reliability Action Items

- 1) Completed root cause analysis to identify interruption sources
- 2) Detailed circuit inspection completed 1Q 2004.
- 3) Repaired/replaced equipment as part of Service Restoration Process.
- 4) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 5) Proactive tree trim circuit completed on 03/03/04.

Notes:

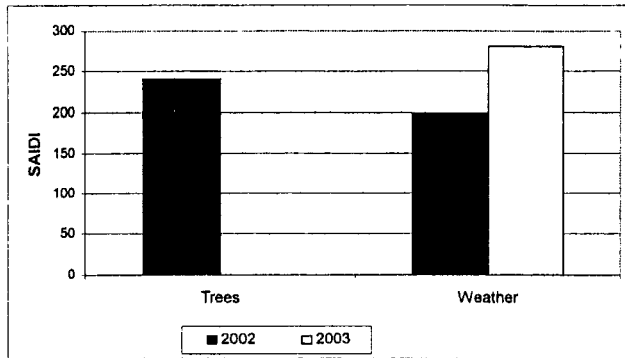
- The primary source of weather interruptions was lightning.

2002-2003 CenterPoint Energy Repeating Circuit Report

Orchard Ckt 01 (OR01) – 58 customers

Repeating Indices: 10% SAIDI

SAIDI



% C&F of Total Interruptions		
	2002	2003
Ckt	0%	0%
Fuse	95%	96%

SAIDI			
	2002	2003	Apr 2004
Value	467.67	295.12	6.41
Rank	8	28	767

Reliability Expenditures

Year	Service Restoration	Major Equip	Minor Equip	URD Equip	Trees	Poles	Total
2003	\$ 6,632	\$ -	\$ 330	\$ 3,764	\$ -	\$ 13,505	\$ 24,231
2004 YTD (5/10/04)	\$ 2,076	\$ -	\$ -	\$ 326	\$ -	\$ -	\$ 2,402

* Reliability expenditures do not reflect analysis/engineering costs.

2003 Reliability Action Items

- 1) Completed root cause analysis to identify interruption sources.
- 2) Detailed circuit inspection completed on 10/18/02.
- 3) Repaired/replaced equipment as part of Service Restoration Process.
- 4) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 5) A single tree related interruption accounted for approximately 51% of yearly SAIDI. This was addressed as part of the Service Restoration Process.
- 6) Pole maintenance program utilized to identify and replace poles as necessary.

2004 Reliability Action Items

- 1) Completed root cause analysis to identify interruption sources.
- 2) Detailed circuit inspection completed on 1Q 2004.
- 3) Repaired/replaced equipment as part of Service Restoration Process.
- 4) Installed/repaired lightning arrestors to address primary root cause for weather related interruptions.
- 5) Ongoing evaluation of protective device coordination in response to recurring interruption program.

Notes:

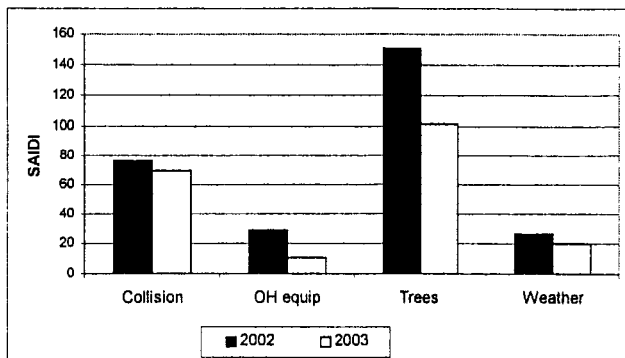
- The primary source of weather interruptions was lightning.

2002-2003 CenterPoint Energy Repeating Circuit Report

Pinehurst Ckt 43 (PI43) – 3,169 customers

Repeating Indices: 10% SAIDI, 10% SAIFI, 300% SAIFI

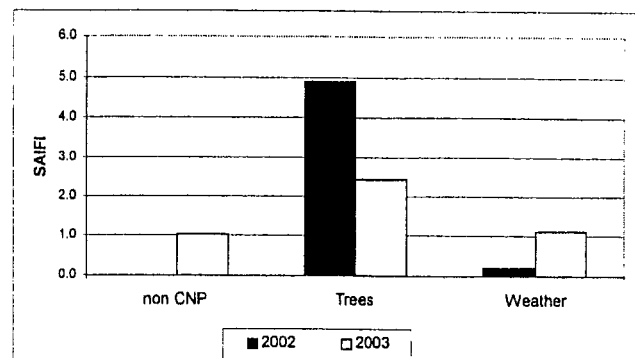
SAIDI



% C&F of Total Interruptions		
	2002	2003
Ckt	50%	67%
Fuse	45%	29%

SAIDI			
	2002	2003	Apr 2004
Value	306.46	229.82	29.14
Rank	49	62	311

SAIFI



% C&F of Total Interruptions		
	2002	2003
Ckt	89%	89%
Fuse	10%	9%

SAIFI			
	2002	2003	Apr 2004
Value	6.77	5.87	0.12
Rank	6	3	507

Reliability Expenditures

Year	Service						Total
	Restoration	Major Equip	Minor Equip	URD Equip	Trees	Poles	
2003	\$ 87,148	\$ 1,963	\$ 5,363	\$ 17,945	\$ 341,218	\$ 5,627	\$ 459,264
2004 YTD (5/10/04)	\$ 54,152	\$ 1,018	\$ 14,562	\$ 2,200	\$ 3,993	\$ -	\$ 75,925

* Reliability expenditures do not reflect analysis/engineering costs.

2003 Reliability Action Plan

- 1) Completed root cause analysis to identify interruption sources.
- 2) Detailed circuit inspection completed on 05/01/03. Additional inspection completed on 12/01/2003.
- 3) Infrared circuit inspections completed on 5/01/03 and 12/01/03.
- 4) Repaired/replaced equipment as part of Service Restoration Process.
- 5) Multiple, random vehicle collisions accounted for approximately 25% of yearly SAIDI. Collision locations were evaluated for opportunities to reduce future potential collisions. Actions taken as necessary.
- 6) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 7) Circuit tree trim completed 6/13/03.
- 8) Pole maintenance program utilized to identify and replace poles as necessary.

Notes:

- The primary source of weather interruptions was lightning.

2004 Reliability Action Plan

- 1) Completed root cause analysis to identify interruption sources.
- 2) Detailed circuit inspection completed on 05/01/04. Additional inspection scheduled for completion by end of year.
- 3) Infrared circuit inspection completed on 5/1/04. Additional inspection scheduled for completion by end of year.
- 4) Repaired/replaced equipment as part of Service Restoration Process.
- 5) Multiple, random vehicle collisions accounted for approximately 30% of yearly SAIDI. Collision locations were evaluated for opportunities to reduce future potential collisions. Actions taken as necessary.
- 6) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 7) Localized tree trimming evaluated and completed as necessary.
- 8) Pole maintenance program will be utilized to identify and replace poles as necessary.

Notes:

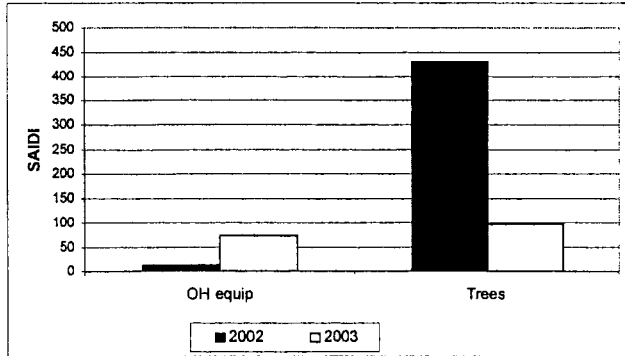
- The primary source of non-CNP SAIFI was an interruption caused by a tree trimming crew.
- The primary source of weather interruptions was lightning.

2002-2003 CenterPoint Energy Repeating Circuit Report

Quail Valley Ckt 05 (QV05) – 1,355 customers

Repeating Indices: 10% SAIDI

SAIDI



% C&F of Total Interruptions		
	2002	2003
Ckt	90%	76%
Fuse	9%	22%

SAIDI			
	2002	2003	Apr 2004
Value	474.54	201.72	32.46
Rank	5	92	289

Reliability Expenditures

Year	Service						Total
	Restoration	Major Equip	Minor Equip	URD Equip	Trees	Poles	
2003	\$ 10,719	\$ 4,945	\$ 7,815	\$ 53,306	\$ 3,003	\$ 1,381	\$ 81,169
2004 YTD (5/10/04)	\$ 5,517	\$ 2,362	\$ 17,368	\$ 33,107	\$ 4,251	\$ 21,030	\$ 83,635

* Reliability expenditures do not reflect analysis/engineering costs.

2003 Reliability Action Items

- 1) Completed root cause analysis to identify interruption sources.
- 2) Detailed circuit inspection completed 1/29/03.
- 3) Infrared circuit inspection completed 8/14/03.
- 4) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 5) Repaired/replaced equipment as part of Service Restoration Process.
- 6) Localized tree trimming evaluated and completed as necessary.
- 7) Pole maintenance program utilized to identify and replace poles as necessary.

2004 Reliability Action Items

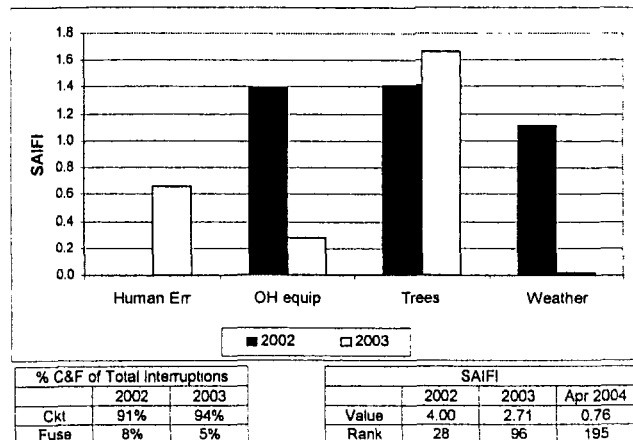
- 1) Completed root cause analysis to identify interruption sources.
- 2) Detailed circuit inspection completed 5/4/04.
- 3) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 4) Repaired/replaced equipment as part of Service Restoration Process.
- 5) Localized tree trimming evaluated and completed as necessary.
- 6) Pole maintenance program utilized to identify and replace poles as necessary.

2002-2003 CenterPoint Energy Repeating Circuit Report

Rayford Ckt 42 (RA42) – 4,586 customers

Repeating Indices: 10% SAIFI

SAIFI



Reliability Expenditures

Year	Service Restoration	Major Equip	Minor Equip	URD Equip	Trees	Poles	Total
2003	\$ 8,323	\$ -	\$ 2,165	\$ 8,579	\$ 52,036	\$ -	\$ 71,104
2004 YTD (5/10/04)	\$ 18,614	\$ -	\$ 6,325	\$ 34,331	\$ 3,917	\$ 3,266	\$ 66,452

* Reliability expenditures do not reflect analysis/engineering costs.

2003 Reliability Action Items

- 1) Completed root cause analysis to identify interruption sources.
- 2) Detailed circuit inspection completed 2Q 2003.
- 3) Infrared circuit inspection completed on 4/2/03.
- 4) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 5) Repaired/replaced equipment as part of Service Restoration Process.
- 6) Additional sectionalizing capabilities installed to minimize impact of interruptions.
- 7) Installed/repared lightning arrestors to address lightning as the primary root cause for weather related interruptions.
- 8) Circuit tree trimming completed on 10/7/02.

2004 Reliability Action Items

- 1) Completed root cause analysis to identify interruption sources.
- 2) Detailed circuit inspection completed 5/19/04.
- 3) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 4) Repaired/replaced equipment as part of Service Restoration Process.
- 5) Localized tree trimming evaluated and completed as necessary.
- 6) Pole maintenance program utilized to identify and replace poles as necessary.

Notes:

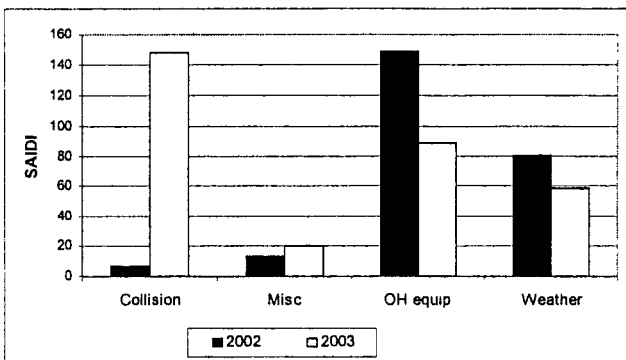
- In the Human Err category, 24% of yearly SAIFI was due to switching errors.

2002-2003 CenterPoint Energy Repeating Circuit Report

Sealy Ckt 04 (SE04) – 783 customers

Repeating Indices: 10% SAIDI

SAIDI



% C&F of Total Interruptions		
	2002	2003
Ckt	0%	0%
Fuse	98%	99%

SAIDI			
	2002	2003	Apr 2004
Value	255.66	333.19	8.50
Rank	88	19	680

Reliability Expenditures

Year	Service			URD Equip	Trees	Poles	Total
	Restoration	Major Equip	Minor Equip				
2003	\$ 30,802	\$ 4,490	\$ 5,874	\$ 4,019	\$ 684	\$ 23,282	\$ 69,149
2004 YTD (5/10/04)	\$ 10,899	\$ 1,666	\$ 27,109	\$ 1,388	\$ 2,223	\$ 8,110	\$ 51,394

* Reliability expenditures do not reflect analysis/engineering costs.

2003 Reliability Action Items

- 1) Repaired/replaced equipment as part of Service Restoration Process.
- 2) Detailed circuit inspection completed on 4/23/03.
- 3) Completed root cause analysis to identify interruption sources.
- 4) Installed additional wildlife protection to address root causes for OH equipment related interruptions.
- 5) Installed/repared lightning arrestors to address primary root cause for weather related interruptions.
- 6) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 7) Pole maintenance program utilized to identify and replace poles as necessary.

2004 Reliability Action Items

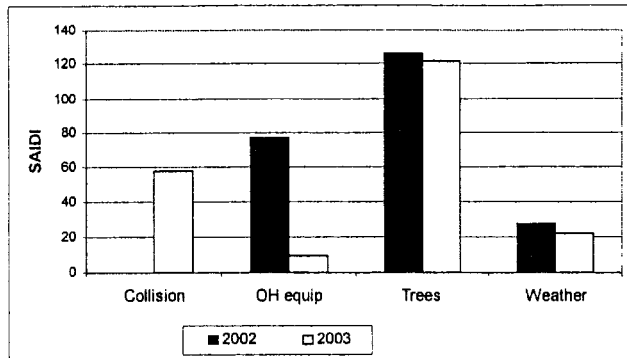
- 1) Repaired/replaced equipment as part of Service Restoration Process.
- 2) Detailed circuit inspection completed on 4/15/04.
- 3) Installed/repared lightning arrestors to address primary root cause for weather related interruptions.
- 4) Multiple, random vehicle collisions accounted for approximately 50% of yearly SAIDI. Collision locations were evaluated for opportunities to reduce future potential collisions. Actions taken as necessary.
- 5) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 6) Pole maintenance program utilized to identify and replace poles as necessary.
- 7) Localized tree trimming evaluated and completed as necessary.

2002-2003 CenterPoint Energy Repeating Circuit Report

Sharpstown Ckt 16 (ST16) – 1,378 customers

Repeating Indices: 10% SAIDI

SAIDI



% C&F of Total Interruptions		
	2002	2003
Ckt	50%	29%
Fuse	47%	62%

SAIDI			
	2002	2003	Apr 2004
Value	237.67	231.73	29.65
Rank	117	60	304

Reliability Expenditures

Year	Service Restoration	Major Equip	Minor Equip	URD Equip	Trees	Poles	Total
2003	\$ 22,609	\$ 5,791	\$ 3,552	\$ 1,288	\$ -	\$ -	\$ 33,241
2004 YTD (5/10/04)	\$ 10,185	\$ -	\$ -	\$ 1,384	\$ 237	\$ -	\$ 11,806

* Reliability expenditures do not reflect analysis/engineering costs.

2003 Reliability Action Items

- 1) Completed root cause analysis to identify interruption sources.
- 2) Detailed circuit inspection completed 1Q 2003. Repairs completed 2Q 2003.
- 3) Repaired/replaced equipment as part of Service Restoration Process.
- 4) Ongoing evaluation of protective device coordination in response to recurring interruption program.

Notes:

- The primary source of weather interruptions was lightning.

2004 Reliability Action Items

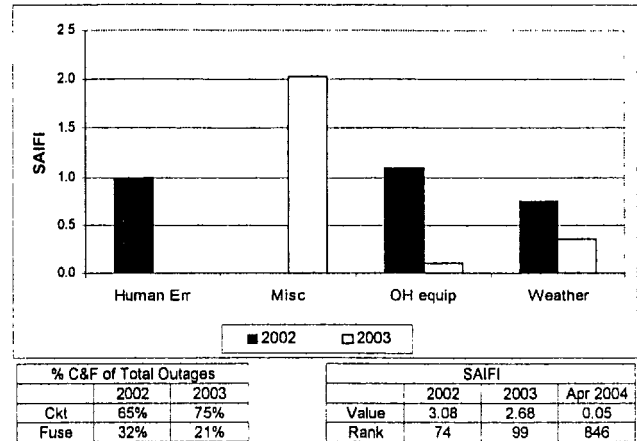
- 1) Completed root cause analysis to identify interruption sources.
- 2) Detailed circuit inspection in progress. Repair & additional inspection scheduled for 6/30/04.
- 3) Infrared circuit inspection completed on 4/8/04. Additional inspection scheduled for 7/26/04.
- 4) Repaired/replaced equipment as part of Service Restoration Process.
- 5) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 6) Single vehicle collision accounted for approximately 25% of yearly SAIDI. Location was evaluated for opportunities to reduce future potential collisions. Actions taken as necessary.
- 7) Majority of tree related SAIDI due to interruptions behind a single line fuse. Tree trim scheduled for completion by 6/1/04.
- 8) Additional automation equipment installed to minimize impact of interruptions.
- 9) SBC scheduled to complete maintenance of SBC joint-use poles in late 2004.

2002-2003 CenterPoint Energy Repeating Circuit Report

South Lane City Ckt 01 (LC01) – 427 customers

Repeating Indices: 10% SAIFI

SAIFI



Reliability Expenditures

Year	Service Restoration	Major Equip	Minor Equip	URD Equip	Trees	Poles	Total
2003	\$ 25,998	\$ 1,830	\$ 10,859	\$ 5,329	\$ 2,826	\$ -	\$ 46,841
2004 YTD (5/10/04)	\$ 13,129	\$ 96	\$ 42,072	\$ 3,192	\$ 3,690	\$ -	\$ 62,178

* Reliability expenditures do not reflect analysis/engineering costs.

2003 Reliability Action Items

- 1) Completed root cause analysis to identify interruption sources.
- 2) Detailed circuit inspection completed 1Q 2003.
- 3) Infrared circuit inspection completed 05/16/03.
- 4) Repaired/replaced equipment as part of Service Restoration Process.
- 5) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 6) Installed/repared lightning arrestors and grounds to address lightning as the primary root cause for weather related interruptions.

Notes:

- In the Human Err category, 32% of yearly SAIFI was due to a circuit level interruption caused by a switching error.

2004 Reliability Action Items

- 1) Completed root cause analysis to identify interruption sources.
- 2) Detailed circuit inspection completed 1Q 2004.
- 3) Repaired/replaced equipment as part of Service Restoration Process.
- 4) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 5) Rehab project underway to address aging infrastructure.

Notes:

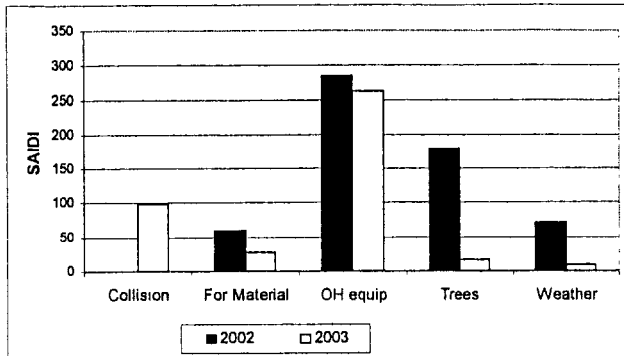
- The primary source of weather interruptions was lightning.
- The primary source of Misc SAIFI was due to construction. Work tags on the circuit resulted in sustained interruptions due to what would have normally been momentary interruptions. The cause of these interruptions is unknown.

2002-2003 CenterPoint Energy Repeating Circuit Report

Stewart Ckt 01 (STW01) – 1,304 customers

Repeating Indices: 10% SAIDI, 10% SAIFI, 300% SAIDI

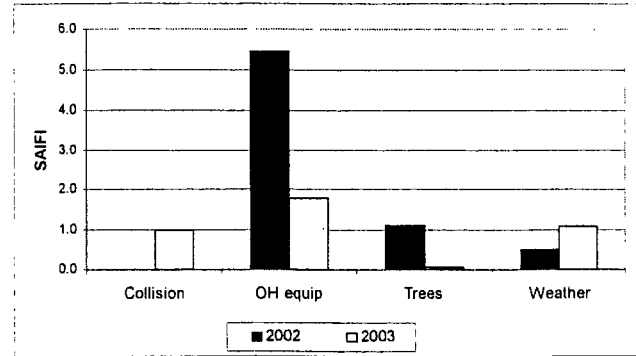
SAIDI



% C&F of Total Interruptions		
	2002	2003
Ckt	60%	22%
Fuse	36%	72%

SAIDI			
	2002	2003	Apr 2004
Value	638.99	480.08	76.49
Rank	2	3	102

SAIFI



% C&F of Total Interruptions		
	2002	2003
Ckt	83%	45%
Fuse	14%	52%

SAIFI			
	2002	2003	Apr 2004
Value	7.69	4.47	1.37
Rank	2	17	35

Reliability Expenditures

Year	Service						Total
	Restoration	Major Equip	Minor Equip	URD Equip	Trees	Poles	
2003	\$ 107,611	\$ 17,455	\$ 106,061	\$ 22,844	\$ 366	\$ 9,364	\$ 263,700
2004 YTD (5/10/04)	\$ 30,328	\$ 5,301	\$ 60,264	\$ 40,927	\$ 51	\$ -	\$ 136,870

* Reliability expenditures do not reflect analysis/engineering costs.

2003 Reliability Action Items

- 1) Detailed circuit inspection completed on 2/7/03.
- 2) Completed root cause analysis to identify interruption sources.
- 3) Repaired/replaced equipment as part of Service Restoration Process.
- 4) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 5) Installed/repared lightning arrestors to address primary root cause for weather related interruptions.
- 6) Strategic use of polymer brackets, pole washing, and infrared inspections is employed to address equipment located near the Gulf of Mexico that is exposed to salt air and sea spray. These issues were captured in the Foreign Material category.
- 7) Localized tree trimming evaluated and completed as necessary.
- 8) Pole maintenance program utilized to identify and replace poles as necessary.

2004 Reliability Action Items

- 1) Detailed circuit inspection completed 1Q 2004.
- 2) Ongoing circuit inspections throughout 2004.
- 3) Completed root cause analysis to identify interruption sources.
- 4) Repaired/replaced equipment as part of Service Restoration Process.
- 5) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 6) Single vehicle collision accounted for approximately 22% of both yearly SAIDI & SAIFI. Location was evaluated for opportunities to reduce future potential collisions. Actions taken as necessary.
- 7) Strategic use of polymer brackets, pole washing, and infrared inspections is employed to address equipment located near the Gulf of Mexico that is exposed to salt air and sea spray. These issues were captured in the Foreign Material category.
- 8) Rehab project underway to address aging infrastructure.

Notes:

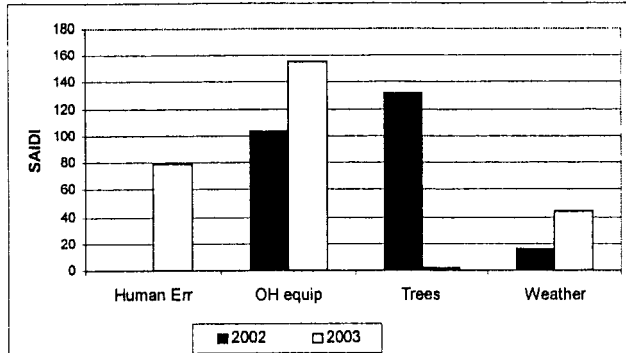
- The primary source of weather interruptions was lightning.

2002-2003 CenterPoint Energy Repeating Circuit Report

Stewart Ckt 02 (STW02) – 1,967 customers

Repeating Indices: 10% SAIDI, 10% SAIIFI

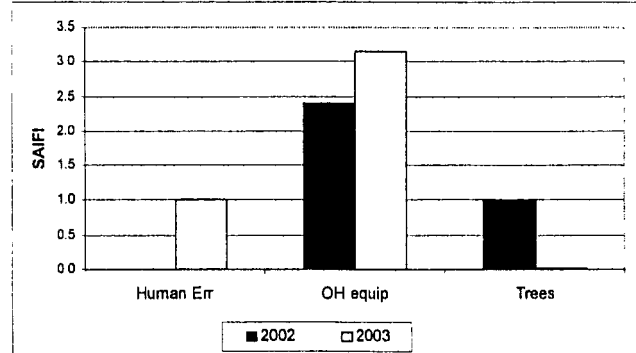
SAIDI



% C&F of Total Interruptions		
	2002	2003
Ckt	82%	69%
Fuse	14%	27%

SAIDI			
	2002	2003	Apr 2004
Value	265.30	310.52	59.35
Rank	75	20	150

SAIFI



% C&F of Total Interruptions		
	2002	2003
Ckt	88%	84%
Fuse	9%	14%

SAIFI			
	2002	2003	Apr 2004
Value	3.71	4.79	0.93
Rank	35	13	180

Reliability Expenditures

Year	Service Restoration	Major Equip	Minor Equip	URD Equip	Trees	Poles	Total
2003	\$ 70,676	\$ 32,214	\$ 81,589	\$ 10,661	\$ 355	\$ 11,232	\$ 206,727
2004 YTD (5/10/04)	\$ 21,281	\$ 31,211	\$ 31,706	\$ 1,161	\$ 483	\$ 6,111	\$ 91,952

* Reliability expenditures do not reflect analysis/engineering costs.

2003 Reliability Action Items

- 1) Detailed circuit inspection completed 1Q 2003.
- 2) Completed root cause analysis to identify interruption sources.
- 3) Repaired/replaced equipment as part of Service Restoration Process.
- 4) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 5) Strategic use of polymer brackets, pole washing, and infrared inspections is employed to address equipment located near the Gulf of Mexico that is exposed to salt air and sea spray. These issues were captured in the Misc and OH equipment categories.
- 6) Additional automation equipment installed to minimize impact of interruptions.
- 7) Installed/repared lightning arrestors to address primary root cause for weather related interruptions.
- 8) Localized tree trimming evaluated and completed as necessary.
- 9) Pole maintenance program utilized to identify and replace poles as necessary.

2004 Reliability Action Items

- 1) Detailed circuit inspection completed 1Q 2004.
- 2) Ongoing circuit inspections throughout 2004.
- 3) Completed root cause analysis to identify interruption sources.
- 4) Repaired/replaced equipment as part of Service Restoration Process.
- 5) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 6) Strategic use of polymer brackets, pole washing, and infrared inspections is employed to address equipment located near the Gulf of Mexico that is exposed to salt air and sea spray. These issues were captured in the Foreign Material category.
- 7) Rehab project underway to address aging infrastructure.
- 8) Localized tree trimming evaluated and completed as necessary.
- 9) Pole maintenance program utilized to identify and replace poles as necessary.

Notes:

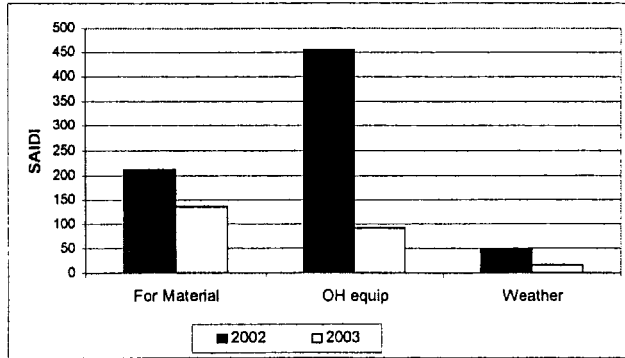
- The primary source of weather interruptions was lightning.
- The source of Human Err SAIDI and SAIIFI was due to a collision caused by a contractor.

2002-2003 CenterPoint Energy Repeating Circuit Report

Stewart Ckt 03 (STW03) – 416 customers

Repeating Indices: 10% SAIDI, 10% SAIFI

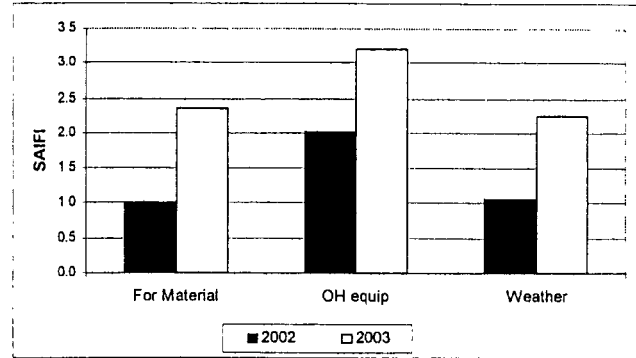
SAIDI



% C&F of Total Interruptions		
	2002	2003
Ckt	97%	88%
Fuse	3%	6%

SAIDI			
	2002	2003	Apr 2004
Value	724.31	260.81	2.66
Rank	1	44	976

SAIFI



% C&F of Total Interruptions		
	2002	2003
Ckt	96%	96%
Fuse	4%	3%

SAIFI			
	2002	2003	Apr 2004
Value	4.16	7.98	0.04
Rank	23	2	933

Reliability Expenditures

Year	Service						Total
	Restoration	Major Equip	Minor Equip	URD Equip	Trees	Poles	
2003	\$ 21,486	\$ 12,557	\$ 23,680	\$ 9,676	\$ -	\$ 9,838	\$ 77,238
2004 YTD (5/10/04)	\$ 14,007	\$ 3,364	\$ 8,448	\$ 2,471	\$ -	\$ -	\$ 28,289

* Reliability expenditures do not reflect analysis/engineering costs.

2003 Reliability Action Items

- 1) Detailed circuit inspection completed 1Q 2003
- 2) Completed root cause analysis to identify interruption sources.
- 3) Repaired/replaced equipment as part of Service Restoration Process.
- 4) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 5) Strategic use of polymer brackets, pole washing, and infrared inspections is employed to address equipment located near the Gulf of Mexico that is exposed to salt air and sea spray. These issues were captured in the Foreign Material category.
- 6) Additional automation equipment installed to minimize impact of interruptions.
- 7) Reconfigure circuit to minimize exposure to interruptions.
- 8) Pole maintenance program utilized to identify and replace poles as necessary.

Notes:

- The primary source of weather interruptions was lightning.

2004 Reliability Action Items

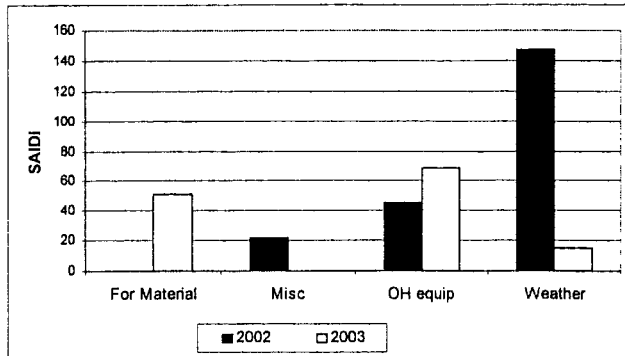
- 1) Detailed circuit inspection completed 1Q 2004.
- 2) Ongoing circuit inspections throughout 2004.
- 3) Completed root cause analysis to identify interruption sources.
- 4) Repaired/replaced equipment as part of Service Restoration Process.
- 5) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 6) Strategic use of polymer brackets, pole washing, and infrared inspections is employed to address equipment located near the Gulf of Mexico that is exposed to salt air and sea spray. These issues were captured in the Foreign Material category.
- 7) Installed/repared lightning arrestors to address primary root cause for weather related interruptions.

2002-2003 CenterPoint Energy Repeating Circuit Report

Stewart Ckt 05 (STW05) – 1,975 customers

Repeating Indices: 10% SAIDI

SAIDI



% C&F of Total Interruptions		
	2002	2003
Ckt	60%	60%
Fuse	33%	19%

SAIDI			
	2002	2003	Apr 2004
Value	251.76	186.86	51.08
Rank	92	117	181

Reliability Expenditures

Year	Service							Total
	Restoration	Major Equip	Minor Equip	URD Equip	Trees	Poles		
2003	\$ 92,728	\$ 40,163	\$ 81,302	\$ 15,608	\$ 533	\$ 18,835	\$ 249,169	
2004 YTD (5/10/04)	\$ 71,879	\$ 10,564	\$ 40,201	\$ 10,442	\$ 558	\$ -	\$ 133,644	

* Reliability expenditures do not reflect analysis/engineering costs.

2003 Reliability Action Items

- 1) Detailed circuit inspection completed on 2/4/03.
- 2) Completed root cause analysis to identify interruption sources.
- 3) Repaired/replaced equipment as part of Service Restoration Process.
- 4) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 5) Strategic use of polymer brackets, pole washing, and infrared inspections was employed to address equipment located near the Gulf of Mexico that is exposed to salt air and sea spray. These issues were captured in the Misc and OH equipment categories.
- 6) Installed/repared lightning arrestors to address primary root cause for weather related interruptions.
- 7) Pole maintenance program utilized to identify and replace poles as necessary.

Notes:

- The primary source of Misc SAIDI was interruptions with unknown causes.

2004 Reliability Action Items

- 1) Detailed circuit inspection completed on 4/14/04.
- 2) Ongoing circuit inspections throughout 2004.
- 3) Completed root cause analysis to identify interruption sources.
- 4) Repaired/replaced equipment as part of Service Restoration Process.
- 5) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 6) Strategic use of polymer brackets, pole washing, and infrared inspections is employed to address equipment located near the Gulf of Mexico that is exposed to salt air and sea spray. These issues were captured in the Foreign Material category.
- 7) Circuit tree trim is scheduled for completion by the end of 2004.

Notes:

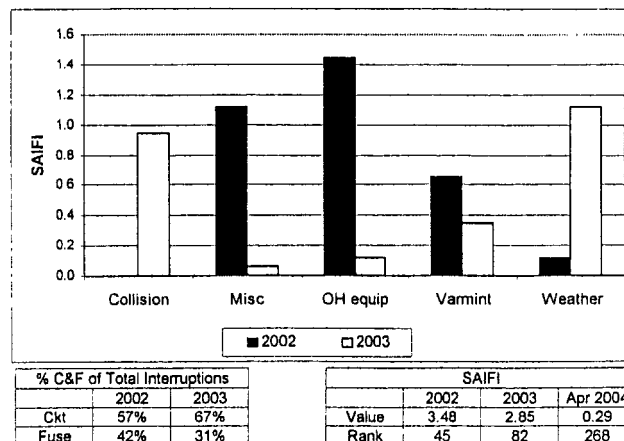
- The primary source of weather interruptions was lightning.

2002-2003 CenterPoint Energy Repeating Circuit Report

Thompsons Ckt 04 (TM04) – 393 customers

Repeating Indices: 10% SAIFI

SAIFI



Reliability Expenditures

Year	Service Restoration	Major Equip	Minor Equip	URD Equip	Trees	Poles	Total
2003	\$ 23,083	\$ 1,409	\$ 13,914	\$ 1,818	\$ 1,278	\$ -	\$ 41,501
2004 YTD (5/10/04)	\$ 11,822	\$ 855	\$ 10,794	\$ 238	\$ 23,554	\$ -	\$ 47,263

* Reliability expenditures do not reflect analysis/engineering costs.

2003 Reliability Action Items

- 1) Completed root cause analysis to identify interruption sources.
- 2) Detailed circuit inspection completed on 12/9/02.
- 3) Infrared circuit inspection completed on 6/13/03.
- 4) Repaired/replaced equipment as part of Service Restoration Process.
- 5) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 6) Installed/revised wildlife protection.
- 7) Localized tree trimming evaluated and completed as necessary.

Notes:

- The primary sources of Misc SAIFI were interruptions with unknown causes.

2004 Reliability Action Items

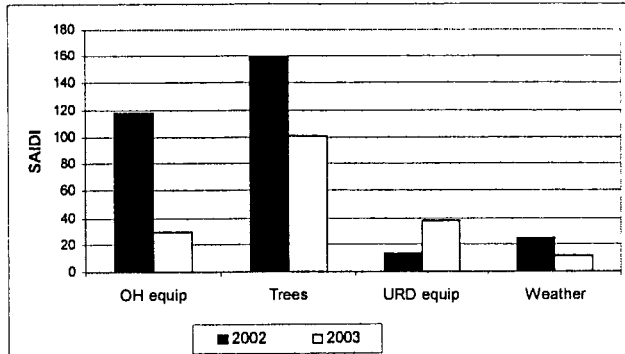
- 1) Completed root cause analysis to identify interruption sources.
- 2) Detailed circuit inspection completed on 3/1/04.
- 3) Repaired/replaced equipment as part of Service Restoration Process.
- 4) Single vehicle collision accounted for approximately 33% of yearly SAIFI. Location was evaluated for opportunities to reduce future potential collisions. Actions taken as necessary.
- 5) In the weather category, a single direct lightning strike accounted for 33% of yearly SAIFI. The situation was addressed as part of the Service Restoration Process.
- 6) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 7) Localized tree trimming evaluated and completed as necessary.

2002-2003 CenterPoint Energy Repeating Circuit Report

Treaschwig Ckt 43 (TWG43) – 5,938 customers

Repeating Indices: 10% SAIDI, 10% SAIFI

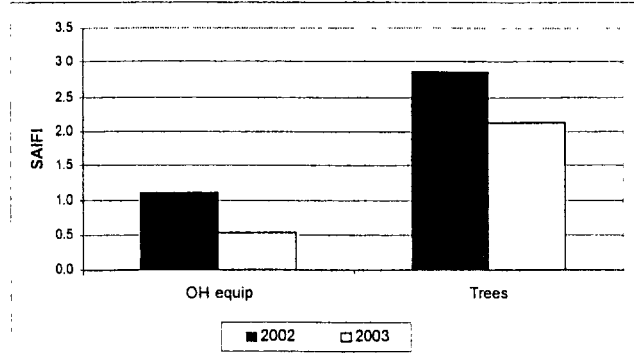
SAIDI



% C&F of Total Interruptions		
	2002	2003
Ckt	76%	59%
Fuse	20%	39%

SAIDI			
	2002	2003	Apr 2004
Value	330.58	182.60	11.03
Rank	38	124	589

SAIFI



% C&F of Total Interruptions		
	2002	2003
Ckt	90%	85%
Fuse	10%	15%

SAIFI			
	2002	2003	Apr 2004
Value	4.28	2.93	0.08
Rank	21	73	642

Reliability Expenditures

Year	Service Restoration	Major Equip	Minor Equip	URD Equip	Trees	Poles	Total
2003	\$ 24,625	\$ 4,890	\$ 8,134	\$ 73,250	\$ 142,431	\$ -	\$ 253,331
2004 YTD (5/10/04)	\$ 28,850	\$ 4,577	\$ 8,218	\$ 39,645	\$ 1,304	\$ -	\$ 82,595

* Reliability expenditures do not reflect analysis/engineering costs.

2003 Reliability Action Items

- 1) Completed root cause analysis to identify interruption sources.
- 2) Infrared circuit inspection completed on 4/1/03.
- 3) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 4) Repaired/replaced equipment as part of Service Restoration Process.
- 5) Construction of additional automated circuit tie to expedite service restoration completed 4th quarter 2002.
- 6) Installed/repared lightning arrestors to address lightning as the primary root cause for weather related interruptions.
- 7) Circuit tree trimming completed on 2/3/03.

2004 Reliability Action Items

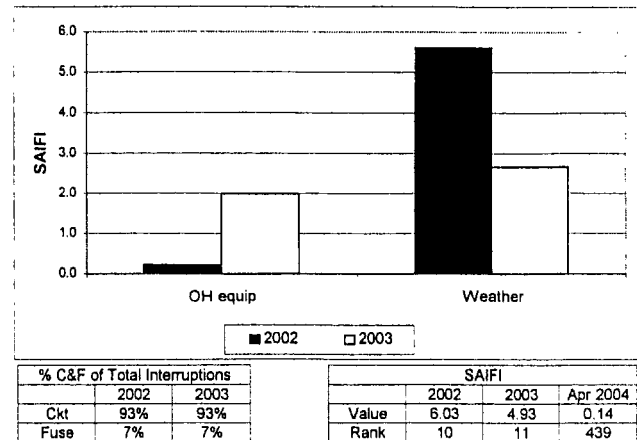
- 1) Completed root cause analysis to identify interruption sources.
- 2) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 3) Repaired/replaced equipment as part of Service Restoration Process.
- 4) Localized tree trimming evaluated and completed as necessary.

2002-2003 CenterPoint Energy Repeating Circuit Report

Westheimer Ckt 02 (WI02) – 920 customers

Repeating Indices: 10% SAIFI, 300% SAIFI

SAIFI



Reliability Expenditures

Year	Service Restoration	Major Equip	Minor Equip	URD Equip	Trees	Poles	Total
2003	\$ 7,206	\$ -	\$ 4,610	\$ 14,927	\$ 2,524	\$ 17,490	\$ 46,757
2004 YTD (5/10/04)	\$ 1,548	\$ -	\$ 11,422	\$ 4,670	\$ -	\$ 1,998	\$ 19,638

* Reliability expenditures do not reflect analysis/engineering costs.

2003 Reliability Action Items

- 1) Completed root cause analysis to identify interruption sources.
- 2) Detailed circuit inspection completed 1Q 2003.
- 3) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 4) Repaired/replaced equipment as part of Service Restoration Process.
- 5) Pole maintenance program utilized to identify and replace poles as necessary.

Notes:

- The primary source of weather interruptions was lightning.

2004 Reliability Action Items

- 1) Completed root cause analysis to identify interruption sources.
- 2) Detailed circuit inspection completed 1Q 2004.
- 3) Infrared circuit inspection scheduled for completion by 7/31/04.
- 4) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 5) Repaired/replaced equipment as part of Service Restoration Process.
- 6) Pole maintenance program utilized to identify and replace poles as necessary.

Notes:

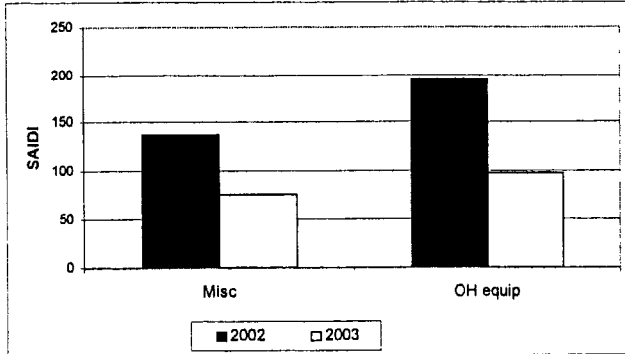
- In the OH equipment category, 21% of the yearly SAIFI was due to a truck with a high load contacting the primary.
- The primary source of weather SAIFI was due to construction. Circuits were rolled to alternate breakers without reclosing capability. This resulted in sustained interruptions due to what would have normally been momentary interruptions (lightning).

2002-2003 CenterPoint Energy Repeating Circuit Report

Woodcreek Ckt 43 (WD43) – 1,394 customers

Repeating Indices: 10% SAIDI

SAIDI



% C&F of Total Interruptions		
	2002	2003
Ckt	93%	72%
Fuse	6%	28%

SAIDI			
	2002	2003	Apr 2004
Value	347.94	188.63	56.73
Rank	33	110	157

Reliability Expenditures

Year	Service Restoration	Major Equip	Minor Equip	URD Equip	Trees	Poles	Total
2003	\$ 13,952	\$ -	\$ 14,722	\$ 34,964	\$ 721	\$ 10,584	\$ 74,944
2004 YTD (5/10/04)	\$ 11,025	\$ 2,748	\$ 32,351	\$ 23,875	\$ 938	\$ -	\$ 70,936

* Reliability expenditures do not reflect analysis/engineering costs.

2003 Reliability Action Items

- 1) Completed root cause analysis to identify interruption sources.
- 2) Repaired/replaced equipment as part of Service Restoration Process.
- 3) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 4) Detailed circuit inspection completed on 4/4/03.
- 5) Infrared circuit inspection complete on 6/23/03.
- 6) Repaired failed 3 ϕ underground equipment as part of the service restoration process – 97% of Misc SAIDI.
- 7) Localized tree trimming evaluated and completed as necessary.
- 8) Pole maintenance program utilized to identify and replace poles as necessary.

2004 Reliability Action Items

- 1) Completed root cause analysis to identify interruption sources.
- 2) Repaired/replaced equipment as part of Service Restoration Process.
- 3) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 4) Detailed circuit inspection completed on 3/16/04.
- 5) Repaired failed 3 ϕ underground equipment as part of the service restoration process – 59% of Misc SAIDI.
- 6) Localized tree trimming evaluated and completed as necessary.

9. Identify and list the feeders on the 2003 Service Quality Report that did not meet either the SAIDI or SAIFI requirements of Subst. R. §25.52(f)(2)(B). Explain why each feeder did not meet the requirements and what action(s) have been or will be taken to achieve compliance for the feeder. Describe the methodology used to calculate the SAIDI and SAIFI system averages of all feeders for purposes of identifying the listed feeders, and provide the calculations.

List of Repeating 300% Greater than System Average SAIFI and/or SAIDI Circuits

PI 43
STW 01
WI 02

See circuit analysis on following pages.

Repeating 300% Circuits

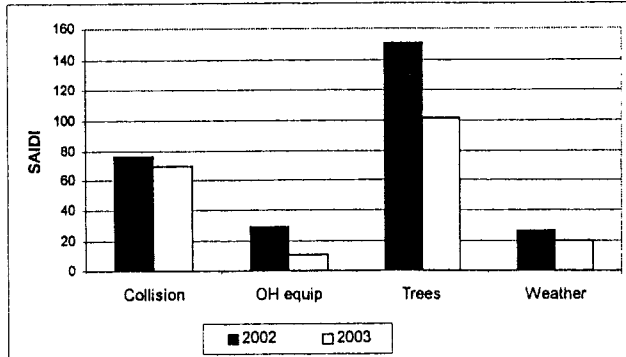
Pinehurst 43	37
Stewart 01	38
Westheimer 02	39

2002-2003 CenterPoint Energy Repeating Circuit Report

Pinehurst Ckt 43 (PI43) – 3,169 customers

Repeating Indices: 10% SAIDI, 10% SAIFI, 300% SAIFI

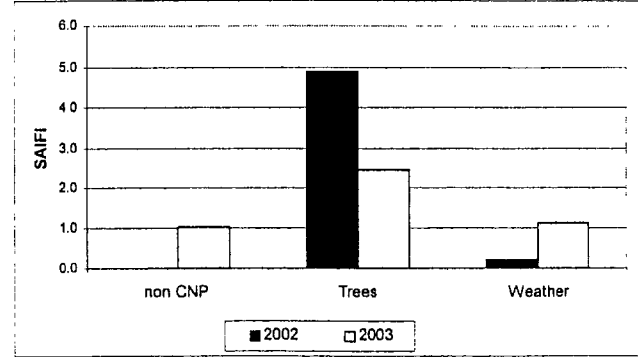
SAIDI



% C&F of Total Interruptions		
	2002	2003
Ckt	50%	67%
Fuse	45%	29%

SAIDI			
	2002	2003	Apr 2004
Value	306.46	229.82	29.14
Rank	49	62	311

SAIFI



% C&F of Total Interruptions		
	2002	2003
Ckt	89%	89%
Fuse	10%	9%

SAIFI			
	2002	2003	Apr 2004
Value	6.77	5.87	0.12
Rank	6	3	507

Reliability Expenditures

Year	Service Restoration	Major Equip	Minor Equip	URD Equip	Trees	Poles	Total
2003	\$ 87,148	\$ 1,963	\$ 5,363	\$ 17,945	\$ 341,218	\$ 5,627	\$ 459,264
2004 YTD (5/10/04)	\$ 54,152	\$ 1,018	\$ 14,562	\$ 2,200	\$ 3,993	-	\$ 75,925

• Reliability expenditures do not reflect analysis/engineering costs.

2003 Reliability Action Plan

- 1) Completed root cause analysis to identify interruption sources.
- 2) Detailed circuit inspection completed on 05/01/03. Additional inspection completed on 12/01/2003.
- 3) Infrared circuit inspections completed on 5/01/03 and 12/01/03.
- 4) Repaired/replaced equipment as part of Service Restoration Process.
- 5) Multiple, random vehicle collisions accounted for approximately 25% of yearly SAIDI. Collision locations were evaluated for opportunities to reduce future potential collisions. Actions taken as necessary.
- 6) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 7) Circuit tree trim completed 6/13/03.
- 8) Pole maintenance program utilized to identify and replace poles as necessary.

Notes:

- The primary source of weather interruptions was lightning.

2004 Reliability Action Plan

- 1) Completed root cause analysis to identify interruption sources.
- 2) Detailed circuit inspection completed on 05/01/04. Additional inspection scheduled for completion by end of year.
- 3) Infrared circuit inspection completed on 5/1/04. Additional inspection scheduled for completion by end of year.
- 4) Repaired/replaced equipment as part of Service Restoration Process.
- 5) Multiple, random vehicle collisions accounted for approximately 30% of yearly SAIDI. Collision locations were evaluated for opportunities to reduce future potential collisions. Actions taken as necessary.
- 6) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 7) Localized tree trimming evaluated and completed as necessary.
- 8) Pole maintenance program will be utilized to identify and replace poles as necessary.

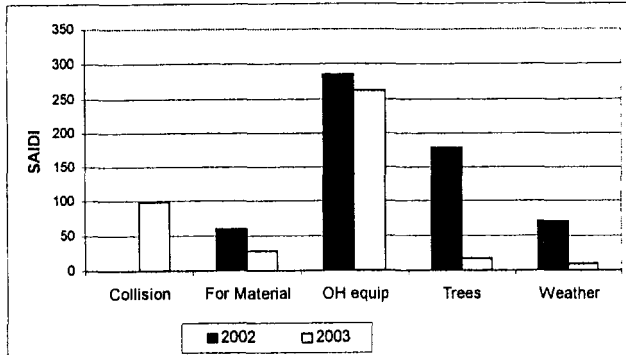
Notes:

- The primary source of non-CNP SAIFI was an interruption caused by a tree trimming crew.
- The primary source of weather interruptions was lightning.

2002-2003 CenterPoint Energy Repeating Circuit Report

Stewart Ckt 01 (STW01) – 1,304 customers
 Repeating Indices: 10% SAIDI, 10% SAIFI, 300% SAIDI

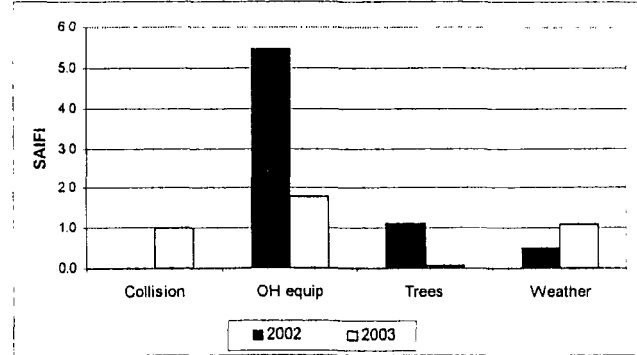
SAIDI



% C&F of Total Interruptions		
	2002	2003
Ckt	60%	22%
Fuse	36%	72%

SAIDI			
	2002	2003	Apr 2004
Value	638.99	460.08	76.49
Rank	2	3	102

SAIFI



% C&F of Total Interruptions		
	2002	2003
Ckt	83%	45%
Fuse	14%	52%

SAIFI			
	2002	2003	Apr 2004
Value	7.69	4.47	1.37
Rank	2	17	35

Reliability Expenditures

Year	Service Restoration	Major Equip	Minor Equip	URD Equip	Trees	Poles	Total
2003	\$ 107,611	\$ 17,455	\$ 106,061	\$ 22,844	\$ 366	\$ 9,364	\$ 263,700
2004 YTD (5/10/04)	\$ 30,328	\$ 5,301	\$ 60,264	\$ 40,927	\$ 51	\$ -	\$ 136,870

* Reliability expenditures do not reflect analysis/engineering costs.

2003 Reliability Action Items

- 1) Detailed circuit inspection completed on 2/7/03.
- 2) Completed root cause analysis to identify interruption sources.
- 3) Repaired/replaced equipment as part of Service Restoration Process.
- 4) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 5) Installed/repared lightning arrestors to address primary root cause for weather related interruptions.
- 6) Strategic use of polymer brackets, pole washing, and infrared inspections is employed to address equipment located near the Gulf of Mexico that is exposed to salt air and sea spray. These issues were captured in the Foreign Material category.
- 7) Localized tree trimming evaluated and completed as necessary.
- 8) Pole maintenance program utilized to identify and replace poles as necessary.

2004 Reliability Action Items

- 1) Detailed circuit inspection completed 1Q 2004.
- 2) Ongoing circuit inspections throughout 2004.
- 3) Completed root cause analysis to identify interruption sources.
- 4) Repaired/replaced equipment as part of Service Restoration Process.
- 5) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 6) Single vehicle collision accounted for approximately 22% of both yearly SAIDI & SAIFI. Location was evaluated for opportunities to reduce future potential collisions. Actions taken as necessary.
- 7) Strategic use of polymer brackets, pole washing, and infrared inspections is employed to address equipment located near the Gulf of Mexico that is exposed to salt air and sea spray. These issues were captured in the Foreign Material category.
- 8) Rehab project underway to address aging infrastructure.

Notes:

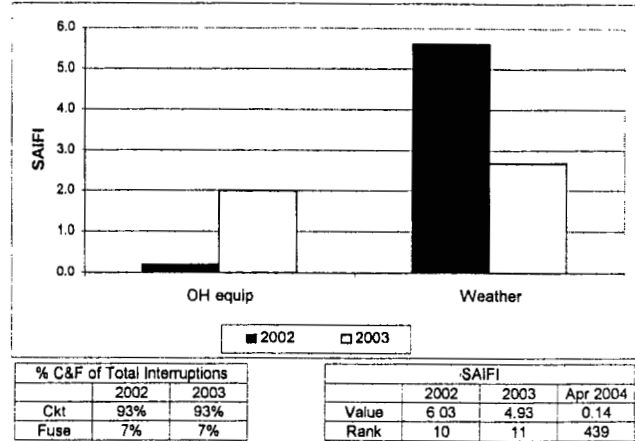
- The primary source of weather interruptions was lightning.

2002-2003 CenterPoint Energy Repeating Circuit Report

Westheimer Ckt 02 (WI02) – 920 customers

Repeating Indices: 10% SAIFI, 300% SAIFI

SAIFI



Reliability Expenditures

Year	Service Restoration	Major Equip	Minor Equip	URD Equip	Trees	Poles	Total
2003	\$ 7,206	\$ -	\$ 4,610	\$ 14,927	\$ 2,524	\$ 17,490	\$ 46,757
2004 YTD (5/10/04)	\$ 1,548	\$ -	\$ 11,422	\$ 4,670	\$ -	\$ 1,998	\$ 19,638

* Reliability expenditures do not reflect analysis/engineering costs.

2003 Reliability Action Items

- 1) Completed root cause analysis to identify interruption sources.
- 2) Detailed circuit inspection completed 1Q 2003.
- 3) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 4) Repaired/replaced equipment as part of Service Restoration Process.
- 5) Pole maintenance program utilized to identify and replace poles as necessary.

Notes:

- The primary source of weather interruptions was lightning.

2004 Reliability Action Items

- 1) Completed root cause analysis to identify interruption sources.
- 2) Detailed circuit inspection completed 1Q 2004.
- 3) Infrared circuit inspection scheduled for completion by 7/31/04.
- 4) Ongoing evaluation of protective device coordination in response to recurring interruption program.
- 5) Repaired/replaced equipment as part of Service Restoration Process.
- 6) Pole maintenance program utilized to identify and replace poles as necessary.

Notes:

- In the OH equipment category, 21% of the yearly SAIFI was due to a truck with a high load contacting the primary.
- The primary source of weather SAIFI was due to construction. Circuits were rolled to alternate breakers without reclosing capability. This resulted in sustained interruptions due to what would have normally been momentary interruptions (lightning).

The SAIFI and SAIDI system averages were determined by using all sustained Forced Interruptions from CenterPoint Energy's Outage Analysis System for 2003. SAIFI was calculated by summing the number of customers affected for all such interruptions and dividing by the total number of customers in the system at the end of the year. SAIDI was calculated by multiplying the number of customers affected times the duration for each such interruption, summing the customer-minutes for all such interruptions, and dividing by the total number of customers in the system at the end of the year. The calculation details are provided below.

Calculation Details

$$\begin{aligned} \text{System SAIFI} &= \text{Total \# Cus. Affected} \div \text{System Cus. Count} \\ &= 2,246,919 \div 1,904,313 \\ &= 1.18 \end{aligned}$$

$$\begin{aligned} 300\% \text{ greater than system SAIFI standard} &= 4 \times \text{System SAIFI} \\ &= 4 \times 1.18 \\ &= 4.72 \end{aligned}$$

$$\begin{aligned} \text{System SAIDI} &= \text{Total \# Cus. Minutes} \div \text{System Cus. Count} \\ &= 161,881,777 \div 1,904,313 \\ &= 85.01 \end{aligned}$$

$$\begin{aligned} 300\% \text{ greater than system SAIDI standard} &= 4 \times \text{System SAIDI} \\ &= 4 \times 85.01 \\ &= 340.04 \end{aligned}$$