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American Electric Power 100 West 15th Street, #650 Austin TX 78701-1662 www.aep.com

PUBLIC UTILITY COMMISSION

February 27, 2003

Mr. Mel Eckhoff, Engineering Specialist Electric Division, Commission Staff Public Utility Commission of Texas 1701 N. Congress Austin, TX 78711

Dear Mr. Eckhoff,

Attached please find the Reliability and Continuity of Service Report for the reporting year 2002 for AEP Texas North Company (formerly West Texas Utilities Company). This report is filed in accordance with Substantive Rule Section 25.81, Project 27270.

As anticipated in Substantive Rule Section 25.52(f)(1), AEP Texas North Company would also like to again inform you of the changes in outage reporting which were implemented beginning in May 2000. These changes were implemented to benefit both AEP Texas North Company and the customer by providing more accurate information on each outage, allowing for better prediction of the location of outages and the number of customers affected, and helping to shorten the duration of outages. AEP Texas North Company will also have better information to supporting planning, design, construction, and maintenance of the distribution facilities. More accurate information will be used in targeting maintenance programs based on the key interruption types by geographic area. AEP Texas North Company is continuing to achieve the benefits of the outage reporting changes.

The benefit of improved accuracy of reporting outages has continued to impact the number of reported outages. System SAIFI increased from 0.716 in 2001 to 0.834 in 2001, while system SAIDI increased from 46.79 in 2001 to 57.3 in 2002. To fully determine the impact of the outage reporting process improvements, AEP Texas North Company will continue to evaluate the new automation changes versus weather influences over the next few years to determine if any change in indices are a result of the "process change" or weather patterns. Currently AEP Texas North Company is continuing to accumulate historical benchmark data on the new automation system to provide definitive answers in the future. AEP Texas North Company is fairly confident that the primary impact to the reliability indices provided in this report is due to the

significant changes that continue to be made to its outage reporting process, and not a real degradation in service.

AEP, along with its merged partner Central and South West (CSW), have been implementing outage reporting process improvements in stages over the last six years. A report titled "Outage Reporting Process Improvements" has been provided before and is being provided again as Attachment A to describe the changes made and the benefits and impacts of these changes. Also, provided as Attachment B, is a brief description of a Distribution Geospatial Information System that is being implemented which will also improve the outage reporting process.

As AEP Texas North Company establishes the 3-year standard for its SAIFI and SAIDI performance, it is important to take into account the impact from the outage reporting process improvements and the abnormal weather impact. Pursuant to Substantive Rule Section 25.52 (f)(1), AEP Texas North Company would like to continue working with the Commission in establishing the system SAIFI and SAIDI standards for AEP Texas North Company to account for the discussed impacts.

Sincerely,

Koper

Randal E. Roper Regulatory Case Manager, AEPSC

Attachments

Outage Reporting Process Improvements

Introduction

Within the United States, the demand for electricity continues to increase, along with the expectations of consumers for more reliable, cost-effective distribution of electricity. In large part, this increasing expectation is driven by the growing dependence on technology within all customer groups. Utilities have responded to this need by improving the reliability of their transmission and distribution systems through developing and implementing cost-effective asset management programs. Asset management programs, in large part, are dependent upon adequate information concerning the performance of installed equipment. This information is now more accessible with recent advances in technology that enable recording, managing, and reporting service interruptions.

American Electric Power (AEP) takes its obligation to serve seriously and continually strives to control the number and duration of service interruptions experienced by its customers. Over the last five years, AEP, and its merged partner Central and South West Corporation (CSW), have been implementing improved processes, new technology and new computer systems to electronically record, manage, and report service interruptions. More accurate outage information is essential in developing cost-effective asset management programs to improve reliability. Other benefits from more accurate outage information include improvements in outage analysis, outage duration and restoration, crew/resource management, and easier archiving and reporting.

In AEP's experience, the implementation of new processes and systems for outage reporting causes a significant increase in the number and accuracy of the outages reported, with a corresponding increase in reliability indices. In looking at other indicators such as customer satisfaction, AEP has determined that the increase in reliability indices does not imply degradation in service reliability.

This report discusses the industry trends in this area, AEP's change in outage reporting, and the associated impacts and benefits to AEP and its customers.

Industry Trends

Improvement in outage data accuracy is increasingly important because of many utilities, such as AEP, continuing desire to optimize design, construction, and maintenance programs. Without outage data, decision-making associated with maintenance programs is dependent mainly upon the judgment of operations personnel. Historically, maintenance programs were focused upon a time or cycle based approach, which has provided a reasonable level of reliable service, but technological improvements in outage reporting allow utilities to improve upon that level of reliable service. With better outage data, the maintenance programs are shifting to an outage mitigation approach based upon outage causes and frequency, thus better targeted to geographic areas. Design and construction programs utilize outage data to identify areas where standard construction techniques are not providing expected reliability.

As utilities continue their quest for more accurate outage information, newer technologies are being introduced to integrate with system monitoring devices to provide better information on equipment performance and failures. These systems allow for better recording, managing and reporting of outage information, and replace the traditional method of outage reporting that relied on field personnel to manually record outage data. Many utilities have been implementing these technologies over the last several years. AEP has researched some of the transition experiences of other companies through telephone surveys, discussion with Navigant Consulting, a firm having experience in outage mitigation strategies, and review of national surveys done by industry organizations. There is a wide rage of reported movement in reliability index values from just a few percentage points to tripling or quadrupling of values. A broad survey of 13 large U.S. electric utilities by Hagler Bailly showed average increases in system SAIFI of 22%, SAIDI of 65%, and CAIDI of 42% attributed to these new computer tools. (*Hagler Bailly, Outage Management System Survey, July 1999*)

Many utilities have seen their outage indices appear to increase upon installation of the newer systems. It is difficult to predict how much these reliability indices will change in any given circumstance, or even to determine the actual impact once implemented. The migration to electronic reporting and the rate of deployment varies among utilities. Some utilities have moved from manual recording to full electronic reporting in one step, while others have moved toward electronic reporting in small, deliberate steps across their wide service territories, thus phasing in the transition over several years. Yet others have incorporated changes in tracking from the feeder or lateral level to tracking at the customer level in their new programs. In all of these scenarios, utilities have seen increased outage indices although there has been no perception of actual decreased reliability.

AEP's Outage Reporting Process – Before and After

With electronic reporting, all restoration activities and dispatcher activities are captured in an Outage Management System (OMS). The OMS provides more accurate counting of affected customers beyond isolating devices and identification of outage times. In contrast, field reporting is dependent on manual data entry, and frequently, the field did not get the data captured due to time pressures, inadequate information, or stressful working conditions during outages.

As mentioned earlier, AEP has been replacing field reporting with electronic reporting. Field reporting relies on line personnel who work outages to record the outage information in an outage reporting system. This process begins when dispatch notifies field personnel about an outage, and provides the personnel with pertinent outage information such as the customers' time off and job location. The field personnel restore the customers' power, and upon completion, notify dispatch that the power is restored. In some areas, the field personnel enter the outage specifics into an outage reporting system

at the end of the day. In cases where the crews worked overtime or around the clock, this information was often not recorded in full. In other areas, crews carried paper outage reporting forms. These forms outlined outage details such as date, start time, end time, number of affected customers, station, circuit, affected equipment, and cause. The forms were completed upon outage restoration and returned to data entry personnel for input into the outage recording system. Various outage reporting programs were then used to develop reliability statistics for different geographical and organizational levels.

Electronic reporting relies on the distribution dispatch center to record all outage and restoration information; thus, it eliminates the need for field reporting of outages. This process begins when customers notify the call center of a service interruption. The customer trouble calls are automatically routed to the OMS at the Distribution dispatch center. The trouble calls are evaluated by the OMS's outage engine to predict the location of the outage on the system. The dispatchers work with field personnel to restore service and capture outage restoration activities in the OMS. This outage information is pulled automatically into the Outage Reporting System (ORS), and is then used to report outage information and statistics. Data is also downloaded to perform analysis and provide information to the planning and maintenance groups.

AEP began implementing electronic outage reporting in its first area in 1996, and completed its last area in January 2001.

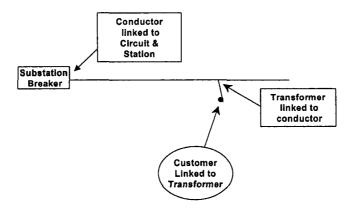
AEP's Impacts of Improved Outage Reporting

AEP has experienced increases in its reliability statistics, like most other utilities converting to newer systems. AEP-PSO experienced increases in both outage duration and frequency indices shortly after converting to the new systems. AEP-SWEPCO changed to electronic reporting during 1996 and by 1998, the total number of reported annual outages increased by 300%. AEP-CPL moved to an automated system in late 1999. In analyzing the change in outages reported by device type, AEP-CPL concludes that the new tools allow for better reporting of outages that occur outside the substation along the feeders. AEP-WTU implemented the system beginning mid-2000, and early predictions are up to a 30% increase in outage frequency, although it is difficult to judge over such a limited time frame. AEP's regions in Ohio and West Virginia developed automated ties between their outage management and outage recording systems in 2000. Very preliminary data indicates they are experiencing increases in their reliability indices as well.

As stated earlier, the increased number of outages reported does not imply degradation of service. AEP accomplished the majority of changes to the new process and technology in 1999 and 2000. Customer satisfaction survey results in 1999, 2000, and again in 2001 show that customers' perceptions of AEP's reliability, outage response, and power quality have remained steady. Information supporting this was provided last year in this same filing for years 1999 and 2000 and is provided in the 2001 Quality of Service filing made in Docket No. 25157, this year.

PROCESS REQUIRED FOR CUSTOMER IDENTIFICATION TO DISTRIBUTION CIRCUITS IN TEXAS

As part of the management of AEPs Distribution Wires Assets, AEP is implementing a DGIS (Distribution Geospatial Information System) using the GE Smallworld platform that provides, on a landbase background, an electrically connected model of distribution wires assets needed to deliver energy from the substation breaker to each energy delivery point (customer service address) off the distribution system.



The diagram above provides a simple visual picture of the data that has to be linked together in order to identify an individual customer to a particular circuit. Where key linkage information is not readily available, an expensive field inventory has to be made to collect the necessary data to provide the customer connectivity links.

This model, when interfaced with AEP's Outage Management System, will provide significant **future** benefit through the availability of more accurate Reliability Statistics due to the automation of collection of outage data. Unfortunately, at the end of 2001only about 37% of AEP's Texas customers could be identified with a specific circuit: 10% for AEP Texas North Company; (51%) for AEP Texas Central Company; and (37%) for Southwest Electric Power Company – Texas (SWEPCO-TX).

During 2001, AEP signed map and data conversion contracts with vendors, that, when completed, will dramatically raise the percentages of customer connectivity as well as significantly increase the accuracy of outage data. It is hopeful that by July 1, 2002, approximately 57% of AEP Texas North Company customer delivery points (cities of Abilene and San Angelo) will be associated with circuits. It is also hopeful that by April 1, 2003 approximately 95+% of AEP Texas Central Company customer delivery points and 95+% of SWEPCO-TX customer delivery points will be associated to circuits. However, as stated above an extensive field inventory will be required and the timing can be considerably affected by the actual effort required to meet these targets. This data would then have to be mapped such that you could link the feeder circuit to a physical address and the physical address to in the case of the Texas companies an ESI ID.

§25.52. -- Reliability and Continuity of Service.

http://www.puc.state.tx.us/rules/subrules/electric/25.52/25.52.doc

Application. This section applies to all electric utilities as defined by the Public Utility Regulatory Act (PURA) §31.002(6) and all transmission and distribution utilities as defined by PURA §31.002(19). The term "utility" as used in this section shall mean an electric utility and a transmission and distribution utility.

Public Utility Regulatory Act §31.002

http://www.puc.state.tx.us/rules/statutes/index.cfm **DEFINITIONS.** The term "Electric utility" does not include a municipally owned utility or an

electric cooperative.

Information typed in highlighted cells will appear on following sheets.

	Type Name of Utility in the Cell Below
Utility:	AEP Texas North Company
	Type Total Number of Distribution Feeders in the Cell Below
Feeders:	402
Due:	February 14, 2003
File:	Five Printed Copies and
	One Electronic Copy of This Excel File
Project:	27270
Address:	Attn: Filing Clerk
	Public Utility Commission of Texas
	P.O. Box 13326
	Austin, Texas 78711-3326
lf vou have a	any questions, please contact:
-	Engineering Specialist
	Electric Division
	Commission Staff
Voice:	512 936 7348
Fax:	512 936 7361

E-mail: mailto:mel.eckhoff@puc.state.tx.us

Service Quality Report To The Public Utility Commission of Texas In Accordance With Substantive Rule §25.81 2002 Reporting Year

AEP Texas North Company

Project 27270

System SAIFI	Jan	Feb	Mar	Apr	May	Jun	յոլ	Aug	Sep	Oct	Νον	Dec	
Forced	0.034	0.021	0.070	0.043	0.120	0.090	0.142	0.097	0.068	0.045	0.055	0.049	0.834
Outside	0.023	0.003	0.120	0.02	0.056	0.033	0.046	0.029	0.023	0.053	0.049	0.036	
Scheduled	1	B	,	0.002	1	1	•	I	1	•	I	1	0.004
Major Events	•	•	,		1	0.091	-	-	. 1	,	•	1	0.091
With Storms													1.423
Without Storms													1.332

Svetem SAIDI					Mair				Con				Total
	Jan	LeD	Mar	Apr	INIAY	IIIN	INC	ĥny	250			- 1	
Forced	3.2	1.1	5.1	1.9	10.9	6.2	10.1	6.8	3.3	3.3	3.0	2.3	57.3
Outside	3.8	0.2	9.3	0.7	2.3	2.6	1.7	1.4	1.2				27.3
Scheduled	•	1		0.5		,	ı	1	•	•	8	0.1	0.7
Maior Events	•	•	•		•	17.6	I	1		I	•	I	17.6
With Storms													102.9
Without Storms													85.3

Distribution Feeder Indices for <u>Forced Interruptions</u> List all Distribution Feeders on Texas System With More Than 10 Customers

Total Number of Feeders 402

2002 SAIFI	2001 SAIFI		Feeder	Number of	2002 SAIFI
Ranking	Ranking	Substation Identification	ID	Customers	Value
1	1	PECOS VALLEY	4080	57	7.23
2	86	CLARENDON	4040	754	5.10
3	121	BAIRD	5125	679	5.06
4	123	PECOS VALLEY	4075	19	4.77
5	169	PECAN BAYOU	6810	651	4.38
6	82	TUSCOLA	3305	1,032	4.17
7		MATADOR	3090	267	4.10
8		MCCAMEY	2855	111	4.02
9		TRENT	2850	18	3.29
10		MASTERSON FIELD	2101	168	3.25
11	389	ABILENE PLANT	1915	93	3.14
12		DUNEFIELD (N CRANE)	3885	52	3.14
13		HAWLEY	4455	610	3.14
14		AB ELMDALE	4520	75	3.13
15		PRESIDIO	4540	827	3.08
16		BAIRD	5120	429	3.06
17		AB HARTFORD ST	3820	1,429	3.05
18		PAULANN	6280	681	3.03
19		WELLINGTON	1770	233	2.97
20		CEDAR GAP (TEC)	5445	108	
21		PRESIDIO	6135	1,022	2.74
22		CLYDE	3630	330	
23		CLYDE	1755	112	
24		RIO PECOS	3835	145	
25		AB MCMURRY	3240	317	2.32
26		PLASTERCO (MWEC)	2720	204	
27		AB DYESS 2	6335	369	
28		CLYDE	1760	365	
29		MERTZON (CVEC)	2905	210	
30		ASPR CONTINENTAL	3830	13	
31		PAULANN	6285	59	
32		PECAN BAYOU	6815	1,197	
33		AB ELM CREEK	1820	35	
34		SHAMROCK	1835	75	
35		AB HARTFORD ST	3685	244	
36		SAND ROAD	5295	425	
37		WINTERS	3765	1,051	
38		TWILIGHT TRAIL	4290	1,740	
39		MARFA	1905	698	
40		TUSCOLA	3730	735	the second se
41	the second se	STAMFORD	4565	937	
42		BRONTE	3590	151	
43	384	GRAYBACK	3320	30	2.11

2002 SAIFI	s North Co 2001 SAIFI		Feeder	Number of	2002 SAIFI
Ranking	Ranking	Substation Identification	ID	Customers	Value
44		SONORA	2045	801	2.11
45		PERKINS PROTHO	5846	18	2.10
46		AB OVER STREET 12KV	3140	581	2.08
47		AB ELM CREEK	4775	594	2.08
48		MERKEL	1895	806	2.08
49		STAMFORD	2835	295	2.07
50	19	AB DYESS 1	1775	299	2.06
51	337	AB MCMURRY	4510	744	2.06
52	301	TURKEY	2980	379	2.06
53	186	STAMFORD	6255	503	2.06
54		PAULANN	6310	583	2.05
55		ROTAN	1865	360	2.04
56		BIG LAKE	4665	403	2.04
57		AB SHELTON ST	4640	775	2.04
58		BIG LAKE	4655	1,116	2.03
59	126	MUNDAY	2080	769	2.03
60	115	AB ELM CREEK	1815	503	2.02
61	263	SA EMERSON ST	4620	923	2.02
62	171	MCCAMEY	2420	134	2.01
63	388	ABILENE PLANT	1580	88	2.01
64	109	MUNDAY REA (BKEC)	2015	56	2.01
65	284	SA LAKE DR	6030	962	2.01
66	379	SA MATHIS FIELD	5100	238	1.99
67		CROCKETT HEIGHTS	4668	80	1.99
68	38	SA GRAPE CREEK	5365	133	1.98
69	2	MCCAMEY	2415	171	1.78
70	204	BRONTE AMBASSADOR	6650	29	1.75
71	195	RANKIN	5735	17	1.64
72	26	SARAGOSA	1590	16	1.62
73	29	AB RAINEY CREEK	4550	377	1.61
74	72	TEXON	4345	135	1.56
75	28	SA COKE ST	3905	116	1.54
76		AB MAPLE ST	5755	731	1.53
77	70	CHILDRESS 69	1480	424	
78	349	AB SHELTON ST	3435	337	1.45
79	253	ASPR CONTINENTAL	4800	28	1.43
80	168	POWELL FIELD	2529	14	
81	242	BEN FICKLIN	6175	410	
82	the second se	ROCHESTER	3290	65	
83		PAINT CREEK	3930	39	
84	217	AB HARTFORD ST	3815	675	
85		TRENT	4245	289	
86	35	RISING STAR	5075	453	
87	256	COLLEGE HILLS	6145	461	
88	102	AB SHELTON ST	3040	404	
89	381	CHILDRESS 20TH ST	5720	124	1.30
90	184	CISCO	1680	571	
91	132	FT DAVIS	4515	397	1.29

	s North Co	mpany	F aadan	Number of	2002 SAIFI
	2001 SAIFI	Substation Identification	Feeder	Number of	
Ranking	Ranking		ID	Customers	Value
92		QUANAH	100	52	1.28
93		CISCO	1685	192	1.27
94		ALPINE 12KV	3875	691	1.26
95		SA GRAPE CREEK	4700	999	1.25
96		TANKERSLY (CVEC)	5260	691	1.24
97	194	SA EMERSON ST	4630	373	1.22
98	361	WELLINGTON	1765	852	1.22
99	302	SA SOUTH	2595	339	1.21
100	248	NORTH ANGELO 12KV BUS	3130	378	1.20
101	227	PUTNAM	2131	194	1.20
102	294	ALPINE 12KV	6820	684	1.19
103	295	AB OVER STREET 12KV	1635	356	1.18
104	174	ROBERT LEE	4120	287	1.17
105	99	AB ELM CREEK	5045	603	1.17
106	200	CROSS PLAINS	2915	570	1.17
107	299	AB REBECCA LANE	2710	302	1.16
108	234	WEST YATES	5595	151	1.16
109	71	SHAMROCK	144	523	1.15
110		SHAMROCK	148	1,095	1.15
111		AB OVER STREET 12KV	1645	502	1.14
112		SA SOUTH	4255	173	1.14
113		SPUR	417	100	1.13
114		SA SOUTH	3990	320	1.13
115		MATADOR	3030	543	1.13
116		AB RAINEY CREEK	4270	787	1.13
117		SONORA 138 SUB	4810	830	1.13
118		SA LAKE DR	5865	1,134	1.12
119		AB WALNUT ST	3110	604	1.12
120		SAND ROAD	5655	734	1.12
121		ROCHESTER	3295	282	1.12
122		STAMFORD	2815	726	1.12
123		THROCKMORTON	3190	708	
124		AB OIL MILL	3900	648	1.12
125		HIGHLAND	6375	189	1.12
126		MEMPHIS	3025	416	
127		AB SHELTON ST	3060	1,705	
128		SA SOUTHLAND HILLS	5860	143	
120		SAND ROAD	5290	750	
130		CLYDE	3635	568	
130		HASKELL 12KV	3770	719	
132		AB OVER STREET 12KV	1840	823	
132		AB REBECCA LANE	5550	598	
134		HAROLD	1495	41	
135		SPUDDER FLAT	4180	65	
136		SA SOUTH	4795	208	
130		SAND ROAD	5195	643	
		SA COKE ST	4910	951	
138			-	202	
139	<u> 111</u>	BRADY	5015		1.09

	s North Co 2001 SAIFI		Feeder	Number of	2002 SAIFI
Ranking	Ranking	Substation Identification	ID	Customers	Value
140		INDIAN MESA	2690	75	1.09
141		MCCAMEY	2830	979	1.09
142		MEMPHIS	3335	1,009	1.08
143		SUN VALLEY	4300	93	1.08
144		POWELL FIELD	2528	35	1.08
145		SA JACKSON ST	4260	696	1.08
146		SA LAKE DR	5880	1,578	1.07
140		ROBERT LEE	4125	687	1.07
148	the second se	NORTH ANGELO 12KV BUS	3120	1,039	1.07
149		PEACOCK	43	50	1.07
149		HEDLEY	5845	321	1.06
150		QUANAH	3100	805	1.06
152		AB MCMURRY	4360	1,258	1.06
152		VERNON	5000	509	1.06
155		SA SOUTH	3995	554	1.06
154		HASKELL 12KV	3495	1,229	1.06
155		CEDAR GAP (TEC)	4115	40	1.05
150		MERTZON (CVEC)	1530	635	1.05
157		CHILDRESS 69	4865	889	1.05
		CHILLICOTHE	4530	581	1.05
159		AB OIL MILL	2780	453	1.03
160			5005	761	1.04
161		ONYX REA	3255	103	1.04
162		SPUR	5170	1,150	1.04
163		RANKIN	6405	319	1.04
164 165		SPUDDER FLAT	4175	60	1.04
165		TURKEY	3825	359	1.03
167		ABILENE PLANT	1565	283	1.03
167		AB MCMURRY	3235	356	
169		AB WALNUT ST	3785	1,839	1.02
170		AB MCMURRY	4350	1,039	1.02
170		AB SHELTON ST	3045	468	
171		SHEFFIELD	6430	209	
172		ABILENE PLANT	1735	150	
173		SA EMERSON ST	4860	396	
174		IRAAN	2050	432	
175		ABILENE PLANT	3175	295	
170		AB OIL MILL	3895	307	
178		AB WALNUT ST	3445	790	
178		HAROLD	3055	40	
		GIRARD	6260	40	
180		ONYX REA	3260	103	
181			5220	705	
182		SA GRAPE CREEK		212	
183		SA EMERSON ST	4625	198	
184		SA COKE ST	4915	205	
185		TEXON	5175		
186		SA MATHIS FIELD	4790	31	
187	New	BOBCAT HILLS	6655	10	0.79

	s North Co	mpany	Feeder	Number of	2002 SAIFI
	2001 SAIFI	Substation Identification	1		
Ranking	Ranking		ID	Customers	Value
188		ROARING SPRINGS	6155	36	0.72
189		NORTH ANGELO 12KV BUS	3115	214	0.69
190		MUNDAY	6715	255	0.67
191		AB MAPLE ST	5750	103	0.61
192		ALPINE 12KV	3155	804	0.58
193		ROBY	3795	89	0.56
194		ABILENE PLANT	1570	279	0.54
195		FREISS RANCH	4870	56	0.53
196		MORAN	2108	201	0.50
197		SA CONCHO	1715	277	0.49
198		WINTERS	2740	110	0.48
199		AB CANYON ROCK	5030	429	0.42
200	220	ALPINE 12KV	6825	1,594	0.41
201	213	THROCKMORTON	2090	58	0.40
202	181	ROUNDTOP	4490	54	0.39
203	214	ALPINE 12KV	3160	983	0.39
204	274	SA CONCHO	1700	195	0.38
205	193	AB COUNTRY CLUB	4855	302	0.38
206	243	BALLINGER	4395	391	0.37
207	84	VALENTINE	5590	711	0.35
208	239	ROTAN	1860	703	0.35
209	245	CHRISTOVAL	6620	443	0.33
210	68	ESTELLINE	3535	121	0.32
211	199	AB VOGEL ST	4410	327	0.32
212	65	EOLA	4950	236	0.32
213	· · · · · · · · · · · · · · · · · · ·	PUTNAM	2129	222	0.32
214	189	CROWELL	3490	52	0.31
215	1	ELDORADO	2880	61	0.31
216	252	RISING STAR	5080	709	0.30
217		COLLEGE HILLS	4840	492	0.28
218	209	CROSS PLAINS	1795	617	0.28
219		SONORA 138 SUB	4805	562	0.28
220		OZONA	3555	32	0.28
221		VERNON	1750	97	0.28
222		AB MCMURRY	3245	882	0.27
223		AB VOGEL ST	4560	453	
224		TALPA ATLANTIC	5180	81	
225		AB REBECCA LANE	5555	999	
226		PAINT ROCK	5235	187	0.27
220		CHILDRESS 69	1800	447	0.26
228		AB COUNTRY CLUB	4730	200	
229		COLLEGE HILLS	4845	324	
230		SA JACKSON ST	4690	408	
230		EDEN	1780	279	
231		SA JACKSON ST	4695	246	
232		CROSS PLAINS	2920	567	
233		SA WALNUT ST	3920	269	
		INDIAN MESA	2695	151	
235	225		12090	101	0.23

	s North Co 2001 SAIFI		Feeder	Number of	2002 SAIFI
Ranking	Ranking	Substation Identification	ID	Customers	Value
236		MERKEL	1890	600	0.23
237		CISCO	1675	897	0.22
238		BEST ATLANTIC	ATLB	22	0.22
239	the second se	ABILENE PLANT	1575	297	0.22
239		OZONA	4185	1,080	0.22
240		HIGHLAND	6385	735	0.21
241		SA CONCHO	1705	284	0.21
242		VERNON	3340	386	0.21
243		ALBANY	3640	311	0.21
244		MUNDAY	3365	448	0.21
		ABILENE PLANT	1910	772	0.21
246		BRONTE	3560	125	0.20
247			2029	222	0.20
248			3270	1,058	0.19
249		HAMLIN		591	0.19
250			1830	477	0.19
251		AB EAST 12KV	4820		
252			7015	87	0.18
253		CHERRY CREEK TAP	5245	11	0.18
254		MENARD	3760	551	0.18
255		PADUCAH CITY	1930	555	0.18
256		CORINTH	2590	28	0.18
257		EDITH HUMBLE	6170	112	0.18
258		SA AVENUE N	1695	1,193	0.18
259		HUMBLE KEMPER	1490	17	0.18
260		CHRISTOVAL	6615	806	0.17
261		AB CANYON ROCK	5035	682	0.17
262		CAREY	6115	122	0.17
263		WAGGONER	5900	41	0.17
264		SA WALNUT ST	3915	528	0.17
265	the second se	WYLIE	2665	898	0.17
266		CISCO	1690	1,017	0.17
267		AB RAINEY CREEK	4220	131	0.16
268		JUNCTION	4335	611	0.16
269		QUANAH	3975	152	
270		FT CHADBOURNE	6515	70	
271		FT DAVIS	3345	128	
272		BUSH KNOB	5200	286	
273		KIRKLAND	3545	39	
274	188	SA WALNUT ST	4635	1,424	0.15
275	101	RIO PECOS	513	40	0.15
276	31	HEDLEY	5870	88	0.15
277	317	SA SOUTHLAND HILLS	5055	566	0.15
278	330	SA WALNUT ST	3925	662	0.14
279	320	FT CHADBOURNE	6520	402	0.14
280	50	WINTERS	2113	815	0.14
281	353	MELVIN	4955	149	0.13
282		ROBY	2276	351	
283		AB SHELTON ST	3050	1,267	

2002 SAIFI	2001 SAIFI	Substation Identification	Feeder	Number of	2002 SAIFI
Ranking	Ranking	Substation Identification	ID	Customers	Value
284	95	HAMLIN	3775	353	0.12
285	365	AFTON	2355	52	0.12
286	300	MARFA	1900	780	0.12
287	7	SANTA ANNA	3415	481	0.12
288	139	RULE	3396	503	0.12
289	334	HIGHLAND	6370	557	0.11
290		ANSON REA (SEC)	5215	492	0.11
291	328	JUNCTION	4340	896	0.11
292	280	VERNON	1520	821	0.11
293	133	AB ELM CREEK	4745	722	0.11
294	257	SA AVENUE N	1730	743	0.11
295		SA SOUTHLAND HILLS	5050	793	0.11
296	364	VERNON CITY PLANT	5780	724	0.10
297	241	STERLING CITY	1445	714	0.10
298	152	CHILLICOTHE	4525	618	0.10
299	331	ELDORADO	1845	1,071	0.10
300	32	MORAN	2107	424	0.09
301	191	VERHALEN	4465	22	0.09
302		RULE	3378	134	0.09
303		SARAGOSA	1552	792	0.09
304	58	AB EAST 12KV	4830	790	0.09
305	262	SA SOUTHLAND HILLS	5455	627	0.09
306	324	FLOMOT	4089	83	0.09
307	185	ASPERMONT	3380	725	0.08
308	77	CHILDRESS 69	2800	710	0.08
309	131	SANTA ANNA	3420	267	0.08
310		ALBANY	3540	578	0.08
311		VERNON	4275	704	0.08
312		IRAAN	2055	350	0.08
313		JAYTON	6125	382	0.08
314		KNOX CITY	3300	629	0.08
315		AB SHELTON ST	3660	597	0.08
316		WOODSON OIL FIELD	30	40	0.08
317		TWILIGHT TRAIL	5855	602	
318		AB ELM CREEK	1810	1,445	0.07
319	1	CROWELL	3980	758	0.07
320		IRAAN	4305	43	0.07
321		MIDWAY LANE	3440	86	0.07
322		OZONA	3810	811	0.07
323		MILES	4670	476	0.07
324		ANSON 12KV	6630	417	0.07
325		PADUCAH CITY	1935	422	0.06
326		WELLINGTON	3700	641	0.06
327	and the second s	AILEEN	4605	414	0.06
328		ALBANY	3655	666	0.06
329		MENARD	3755	889	0.06
330	297	BALLINGER	4370	864	0.06
331	197	KNOX CITY	3390	239	0.06

2002 SAIFI	s North Co 2001 SAIFI		Feeder	Number of	2002 SAIFI
Ranking	Ranking	Substation Identification	ID	Customers	Value
332		WYLIE	6340	1,278	0.06
333		AB MCMURRY	4355	1,170	0.06
334		SA SOUTH	3500	892	0.06
335		HASKELL 12KV	5240	186	0.05
336		AB HARTFORD ST	3690	170	0.05
337		SA JACKSON ST	4265	1,155	0.05
338		AB VOGEL ST	4405	706	0.05
339		BEN FICKLIN	6180	1,216	0.05
340		QUANAH	3530	582	0.05
341		AFTON	2225	62	0.05
342		BALLINGER	4375	1,205	0.05
343		BRADSHAW (CLIMAX)	11301	43	0.05
344		SA AVENUE N	1655	547	0.05
345		BARNHART	3725	112	0.05
345		BRONTE	4160	371	0.03
			· · · · · · · · · · · · · · · · · · ·		0.04
347		WYLIE	2675	887 150	
348		AB COUNTRY CLUB	4725		0.04
349			4150	25	0.04
350		AB SHELTON ST	3145	926	0.04
351		SA JACKSON ST	4685	2,751	0.04
352		AB EAST 12KV	4825	556	0.04
353		CHILDRESS 20TH ST	5725	691	0.04
354		NORTH ANGELO 12KV BUS	3125	1,520	0.04
355		RANKIN	6400	282	0.04
356		AB VOGEL ST	4650	1,009	0.03
357		ANSON 12KV	6635	586	0.03
358		AB ELM CREEK	1825	771	0.03
359		TWILIGHT TRAIL	4285	1,395	0.03
360		MCELROY	5165	165	0.03
361		BENJAMIN (BEPC)	5680	177	0.03
362		WEINERT	6490	138	0.03
363		AFTON	2310	287	0.03
364		AB CANYON ROCK	5025	40	0.03
365		EDEN	3195	516	
366		SA JACKSON ST	4250	215	
367		SHAFTER	5110	50	
368		SA AVENUE N	1975	438	
369		ROWENA	4480	136	
370		AB EAST 12KV	5760	1,086	0.01
371	48	AB ELM CREEK	4780	584	0.01
372	150	AILEEN	6435	494	0.01
373	269	VERNON CITY PLANT	5840	91	0.01
374	387	AB COUNTRY CLUB	4735	502	0.01
375	374	ASPERMONT	6640	94	
376	New	SPUR	411	279	0.01
377	401	VERNON CITY PLANT	5785	193	0.01
378	180	AB RAINEY CREEK	4225	243	0.01
379	380	TWILIGHT TRAIL	3150	482	0.01

2002 SAIFI	2001 SAIFI	Substation Identification	Feeder	Number of	2002 SAIFI
Ranking	Ranking	Substation Identification	ID	Customers	Value
380	128	SA WALNUT ST	3910	488	0.01
381	329	SPUR	414	279	0.01
382	385	AB REBECCA LANE	6915	996	0.01
383	154	AILEEN	4600	398	0.01
384	222	COLLEGE HILLS	5520	212	0.00
385	346	HIGHLAND	6380	2,137	0.00
386	378	MCCAMEY	3670	460	0.00
387	272	BEN FICKLIN	6185	589	0.00
388	145	COLLEGE HILLS	4835	296	0.00
389	283	GRAYBACK	3315	320	0.00
390	20	ABILENE PLANT	1740	183	0.00
391	267	COLLEGE HILLS	5515	185	0.00
392	395	CROSS PLAINS	5130	61	0.00
393	348	FT DAVIS	6570	135	0.00
394	397	HAMLIN SHELL	6330	23	0.00
395	308	KNOX CITY	3985	17	0.00
396	398	PADUCAH REA (GBEC)	13	104	0.00
397	161	SA CONCHO	1725	30	0.00
398	254	SWENSON	136	35	0.00
399	327	TRUSCOTT	3845	43	0.00
400	367	VERNON CITY PLANT	5770	386	0.00
401	368	VERNON CITY PLANT	5835	92	0.00
402	403	WEINERT	3363	138	0.00

Distribution Feeder Indices for <u>Forced Interruptions</u> List all Distribution Feeders on Texas System With More Than 10 Customers

Total Number of Feeders
402

2002 SAIDI	2001 SAIDI		Feeder	Number of	2002 SAIDI
Ranking	Ranking	Substation Identification	ID	Customers	Value
1		PECOS VALLEY	4080	57	1,002.80
2	115	PECOS VALLEY	4075	19	745.70
3	348	SHAMROCK	1835	75	635.60
4	15	AB ELMDALE	4520	75	618.90
5	235	CEDAR GAP (TEC)	5445	108	543.40
6	96	MASTERSON FIELD	2101	168	505.40
7	342	WELLINGTON	1770	233	435.90
8	52	PLASTERCO (MWEC)	2720	204	415.50
9	206	TWILIGHT TRAIL	4290	1,740	404.10
10	306	BIG LAKE	4655	1,116	395.90
11	3	DUNEFIELD (N CRANE)	3885	52	380.50
12	36	BIG LAKE	4665	403	379.40
13	267	SUN VALLEY	4300	93	339.30
14		TRENT	2850	18	338.10
15	266	BEN FICKLIN	6175	410	
16	172	CLARENDON	4040	754	281.60
17	41	HAWLEY	4455	610	267.40
18	143	TUSCOLA	3305	1,032	266.10
19	274	AB OVER STREET 12KV	3140	581	264.30
20		AB DYESS 2	6335	369	
21		AB ELM CREEK	1820	35	
22	117	PECAN BAYOU	6810	651	251.60
23		AB MCMURRY	4510	744	
24		ALPINE 12KV	3875	691	241.00
25		RIO PECOS	3835	145	
26		SA MATHIS FIELD	5100	238	
27		PEACOCK	43	50	
28		TEXON	4345	135	
29		MCCAMEY	2420	134	
30	1	CLYDE	1755	112	
31		BAIRD	5125	679	
32		SHAMROCK	148	1,095	
33		PECAN BAYOU	6815	1,197	
34		ASPR CONTINENTAL	3830	13	
35		SA EMERSON ST	4620	923	
36		CLYDE	3630	330	
37		AB MCMURRY	4350	1,140	
38		CLYDE	1760	365	
39		SA EMERSON ST	4630	373	
40		CROSS PLAINS	2915	570	
41		PAULANN	6280	681	
42		MCCAMEY	2855	111	
43	211	PUTNAM	2131	194	165.80

2002 SAIDI	2001 SAIDI	Substation Identification	Feeder	Number of	2002 SAIDI
Ranking	Ranking	Substation Identification	ID	Customers	Value
44	286	AB REBECCA LANE	2710	302	161.10
45	313	SA EMERSON ST	4860	396	159.40
46	174	TUSCOLA	3730	735	155.00
47	39	AB DYESS 1	1775	299	154.60
48	111	AB MCMURRY	3240	317	154.30
49	279	INDIAN MESA	2690	75	153.00
50	337	AB HARTFORD ST	3820	1,429	149.00
51	33	SA GRAPE CREEK	5365	133	148.90
52	287	SA EMERSON ST	4625	212	148.70
53	389	ABILENE PLANT	1915	93	147.70
54	12	SPUDDER FLAT	4175	60	146.70
55	126	PRESIDIO	4540	827	145.70
56	203	COLLEGE HILLS	6145	461	145.00
57		CROCKETT HEIGHTS	4668	80	140.30
58		MERKEL	1895	806	138.50
59		TANKERSLY (CVEC)	5260	691	134.90
60		PAINT CREEK	3930	39	134.40
61		SONORA	2045	801	131.00
62		MCCAMEY	2415	171	127.40
63		GRAYBACK	3320	30	123.80
64		ONYX REA	3260	103	120.70
65	-	SA GRAPE CREEK	4700	999	118.30
66		SARAGOSA	1590	16	118.30
67		GIRARD	6260	41	115.50
68		SA SOUTHLAND HILLS	5860	143	112.00
69		BRONTE AMBASSADOR	6650	29	111.30
70		PAULANN	6285	59	110.70
71		ROCHESTER	3290	65	110.70
72		BOBCAT HILLS	6655	10	109.90
73		AB MAPLE ST	5755	731	109.20
74		ASPR CONTINENTAL	4800	28	108.70
75		STAMFORD	6255	503	108.70
76		RANKIN	5735	17	107.70
77		AB ELM CREEK	1815	503	
78		STAMFORD	2835	295	105.50
79	the second s	PAULANN	6310	583	105.30
80		WINTERS	3765	1,051	104.00
81		STAMFORD	4565	937	101.20
82		NORTH ANGELO 12KV BUS	3120	1,039	100.70
83		SA SOUTH	2595	339	99.60
84		BRONTE	3590	151	98.30
85		WELLINGTON	1765	852	97.80
86		MUNDAY REA (BKEC)	2015	56	95.80
87		TRENT	4245	289	94.60
88		ROBERT LEE	4120	287	92.90
89		MATADOR	3090	267	91.80
90		POWELL FIELD	2529	14	91.70
<u> </u>		PRESIDIO	6135	1,022	89.80

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	2001 SAIDI	Substation Identification	1	Number of	
Ranking	Ranking		ID	Customers	Value
92		SA GRAPE CREEK	5220	705	89.20
93		AB RAINEY CREEK	4550	377	89.00
94		MEMPHIS	3025	416	86.70
95		MEMPHIS	3335	1,009	82.80
96		AB OVER STREET 12KV	1635	356	82.40
97		ROCHESTER	3295	282	82.20
98		MUNDAY	2080	769	82.00
99		WEST YATES	5595	151	81.40
100		AB SHELTON ST	3040	404	79.50
101		FREISS RANCH	4870	56	77.60
102		PERKINS PROTHO	5846	18	76.90
103	250	AB SHELTON ST	3060	1,705	76.80
104	358	ONYX REA	3255	103	76.60
105	60	SHEFFIELD	6430	209	76.50
106	170	SA MATHIS FIELD	4790	31	75.60
107	193	BAIRD	5120	429	75.40
108	364	CHILDRESS 20TH ST	5720	124	74.10
109	257	HIGHLAND	6375	189	74.10
110	New	BEST ATLANTIC	ATLB	22	73.60
111	315	CEDAR GAP (TEC)	4115	40	71.90
112	272	ROTAN	1865	360	71.90
113		SA SOUTH	3990	320	71.70
114	2	QUANAH	100	52	71.40
115		SA SOUTH	4255	173	70.60
116		AB MAPLE ST	5750	103	69.50
117	226	AB HARTFORD ST	3685	244	68.70
118	109	HAROLD	1495	41	66.70
119		POWELL FIELD	2528	35	66.40
120		MERTZON (CVEC)	2905	210	65.70
121	261	SAND ROAD	5295	425	65.30
122		MORAN	2108	201	65.20
123	332	AB SHELTON ST	4640	775	64.10
124	162	CHILDRESS 69	1480	424	62.60
125		ALPINE 12KV	3155	804	61.60
126		AB MCMURRY	3235	356	
127		FT DAVIS	4515	397	61.10
128		SA COKE ST	3905	116	
129		TURKEY	2980	379	
130		CISCO	1680	571	58.80
131		SA LAKE DR	5865	1,134	
132		AB OVER STREET 12KV	1840	823	
133		NORTH ANGELO 12KV BUS	3115	214	
134		CHRISTOVAL	6620	443	
135		ESTELLINE	3535	121	56.90
136		THROCKMORTON	3190	708	
130		SA COKE ST	4910	951	55.50
137		AB OVER STREET 12KV	1645	502	
130		AB OIL MILL	3900	648	
138	120		13900	040	54.70

2002 SAIDI	2001 SAIDI		Feeder	Number of	2002 SAIDI
Ranking	Ranking	Substation Identification	ID	Customers	Value
140		ABILENE PLANT	1580	88	54.30
141		AB REBECCA LANE	5550	598	54.00
142		NORTH ANGELO 12KV BUS	3130	378	54.00
143		AB ELM CREEK	4775	594	53.60
144		CHILDRESS 69	4865	889	51.60
145		CISCO	1685	192	50.90
146		RISING STAR	5075	453	50.40
147		AB HARTFORD ST	3815	675	50.20
148		AB WALNUT ST	3110	604	49.00
149		AB ELM CREEK	5045	603	48.80
150		AB OIL MILL	2780	453	47.90
151		MCCAMEY	2830	979	46.80
152		AB SHELTON ST	3435	337	46.60
153		BRADY	5015	202	46.50
154		SA LAKE DR	5880	1,578	45.80
155		SPUR	5170	1,150	45.60
156		SPUR	417	100	45.20
157		SA CONCHO	1715	277	45.10
158		AB RAINEY CREEK	4270	787	44.50
159		STAMFORD	2815	726	44.20
160		AB MCMURRY	4360	1,258	43.30
161		SA JACKSON ST	4260	696	42.90
162		HASKELL 12KV	3770	719	42.50
163		THROCKMORTON	2090	58	41.90
164	123	AB OIL MILL	3895	307	40.80
165	201	CLYDE	3635	568	40.20
166	324	ROBERT LEE	4125	687	39.80
167	133	TALPA ATLANTIC	5180	81	39.40
168	276	SAND ROAD	5655	734	39.10
169	130	HASKELL 12KV	3495	1,229	38.80
170	310	SAND ROAD	5195	643	38.40
171	173	SAND ROAD	5290	750	38.10
172	233	ALPINE 12KV	3160	983	37.70
173	139	SHAMROCK	144	523	37.00
174	157	INDIAN MESA	2695	151	34.10
175	149	MATADOR	3030	543	33.30
176	268	CLARENDON	5005	761	33.10
177	89	SONORA 138 SUB	4810	830	33.00
178	141	SA COKE ST	4915	198	32.90
179	269	MUNDAY	6715	255	32.70
180	171	ROBY	3795	89	32.70
181	38	AB WALNUT ST	3785	1,839	32.60
182	192	RANKIN	6405	319	32.50
183		AB CANYON ROCK	5030	429	32.30
184	341	MARFA	1905	698	32.30
185	59	VALENTINE	5590	711	32.20
186	190	AB COUNTRY CLUB	4855	302	32.10
187	308	HEDLEY	5845	321	31.90

2002 SAIDI			Feeder	Number of	2002 SAIDI
Ranking	Ranking	Substation Identification	ID	Customers	Value
188		SA SOUTH	3995	554	31.60
189		MENARD	3760	551	31.30
189		AB SHELTON ST	3045	468	31.30
				790	31.10
191			3445	279	
192			1570	581	31.10
193		CHILLICOTHE	4530		31.10
194		TEXON	5175	205	30.90
195		PUTNAM	2129	222	30.10
196		SONORA 138 SUB	4805	562	30.00
197		CHRISTOVAL	6615	806	29.80
198		AB VOGEL ST	4560	453	29.60
199		SPUDDER FLAT	4180	65	29.60
200		SA SOUTH	4795	208	29.10
201		SA LAKE DR	6030	962	28.80
202		VALERA HUMBLE	7015	87	28.40
203		SA WALNUT ST	3920	269	27.90
204		AB VOGEL ST	4410	327	27.00
205			4840	492	26.20
206	215	HIGHLAND	6385	735	26.20
207		QUANAH	3100	805	26.10
208	377	WINTERS	2740	110	25.90
209	135	MILES	4670	476	25.80
210	116	CROSS PLAINS	2920	567	25.50
211	30	EOLA	4950	236	25.50
212	175	ROUNDTOP	4490	54	25.40
213	142	SA JACKSON ST	4695	246	24.70
214	321	ALPINE 12KV	6820	684	24.40
215	118	CROWELL	3490	52	24.40
216	100	AB COUNTRY CLUB	4730	200	23.70
217	202	VERNON	5000	509	22.40
218	25	MERKEL	1890	600	21.50
219	376	EDITH HUMBLE	6170	112	20.50
220	140	IRAAN	2050	432	20.40
221		SA WALNUT ST	3915	528	
222		ABILENE PLANT	1910	772	
223		MERTZON (CVEC)	1530	635	
224		FT CHADBOURNE	6515	70	
225		ALPINE 12KV	6825	1,594	
226		ROARING SPRINGS	6155	36	
227		AB MCMURRY	3245	882	
228		PAINT ROCK	5235	187	18.80
229		EDEN	1780	279	
230		BALLINGER	4395	391	
230		CAREY	6115	122	the second se
231		ABILENE PLANT	3175	295	
		OZONA	4185	1,080	
233					
234			1700	195	
235	277	AB CANYON ROCK	5035	682	17.30

2002 SAIDI	2001 SAIDI		Feeder	Number of	2002 SAIDI
Ranking	Ranking	Substation Identification	ID	Customers	Value
236		COLLEGE HILLS	4845	324	16.90
237		ABILENE PLANT	1735	150	16.60
238		BUSH KNOB	5200	286	16.60
239		RISING STAR	5080	709	16.60
240		SA WALNUT ST	3925	662	16.30
240		CHERRY CREEK TAP	5245	11	15.70
242		AB ELM CREEK	1810	1,445	15.50
242		RIO PECOS	513	40	15.50
243		OZONA	3555	32	15.40
245		HAROLD	3055	40	15.10
245		WAGGONER	5900	40	15.10
240		TURKEY	3825	359	14.80
247		AB REBECCA LANE	5555	999	14.60
248		ALBANY	2029	222	14.00
249			1830	591	14.40
		CORINTH	2590	28	
251					14.10
252			4690	408	13.80
253		WYLIE	2665	898	13.80
254		SA CONCHO	1705	284	13.70
255		CROSS PLAINS	1795	617	13.30
256		SA SOUTHLAND HILLS	5055	566	13.10
257		CISCO	1690	1,017	13.00
258		SA SOUTH	3500	892	12.90
259		FT DAVIS	3345	128	12.70
260	in the second se	HIGHLAND	6370	557	12.70
261		QUANAH	3975	152	12.70
262		CISCO	1675	897	12.60
263		HEDLEY	5870	88	12.00
264		MELVIN	4955	149	12.00
265		SA AVENUE N	1730	743	11.90
266		ALBANY	3640	311	11.60
267		RULE	3396	503	11.60
268		FT CHADBOURNE	6520	402	11.50
269	244	AB EAST 12KV	4820	477	11.40
270	249	AB MCMURRY	4355	1,170	11.10
271	20	SANTA ANNA	3415	481	11.00
272	282	VERNON	3340	386	11.00
273	129	JAYTON	6125	382	10.80
274	164	CHILDRESS 69	1800	447	10.60
275	79	ABILENE PLANT	1575	297	10.40
276	252	SA AVENUE N	1695	1,193	10.40
277	299	AB SHELTON ST	3050	1,267	10.20
278	154	ELDORADO	2880	61	10.20
279	330	JUNCTION	4335	611	10.00
280		SA WALNUT ST	4635	1,424	10.00
281		MIDWAY LANE	3440	86	9.80
282		BRONTE	3560	125	9.50
283		VERNON CITY PLANT	5780	724	9.40

2002 SAIDI	·····	npany	Feeder	Number of	2002 SAIDI
Ranking	Ranking	Substation Identification	ID	Customers	Value
284		WOODSON OIL FIELD	30	40	9.40
285		KIRKLAND	3545	39	9.20
286		ROBY	2276	351	9.10
287		MORAN	2107	424	9.00
288		ROTAN	1860	703	8.90
289		SA SOUTHLAND HILLS	5050	793	8.90
290		AFTON	2355	52	8.80
291		ABILENE PLANT	1565	283	8.60
292		HAMLIN	3775	353	8.50
293		SA SOUTHLAND HILLS	5455	627	8.30
294		TWILIGHT TRAIL	5855	602	8.10
295		AB ELM CREEK	4745	722	7.90
296		SA JACKSON ST	4265	1,155	7.90
297		CHILDRESS 69	2800	710	7.70
298		VERNON	1750	97	7.60
299		AB SHELTON ST	3660	597	7.40
300		ANSON REA (SEC)	5215	492	7.20
301		STERLING CITY	1445	714	7.20
302		PADUCAH CITY	1930	555	6.90
303		HUMBLE KEMPER	1490	17	6.70
304	-	AB RAINEY CREEK	4220	131	6.40
305		HAMLIN	3270	1,058	6.30
306		AB HARTFORD ST	3690	170	6.20
307		BEN FICKLIN	6180	1,216	6.20
308		FLOMOT	4089	83	6.20
309		OZONA	3810	811	6.20
310		QUANAH	3530	582	6.10
311		VERHALEN	4465	22	5.90
312		MUNDAY	3365	448	5.80
313		ALBANY	3540	578	5.70
314		BARNHART	3725	112	5.60
315	the second s	AILEEN	4605	414	5.20
316		WINTERS	2113	815	5.10
317		AFTON	2225	62	
318		ASPERMONT	3380	725	4.90
319		SARAGOSA	1552	792	4.80
320		MARFA	1900	780	4.70
321		VERNON	4275	704	4.50
322		ALBANY	3655	666	4.40
323		CROWELL	3980	758	4.40
324		JUNCTION	4340	896	4.30
325		CHILLICOTHE	4525	618	4.10
326		RULE	3378	134	4.10
320		AB EAST 12KV	4830	790	3.90
328		HASKELL 12KV	5240	186	3.90
329		IRAAN	2055	350	3.90
329		MCELROY	5165	165	
331		WYLIE	2675	887	3.90

2002 SAIDI		npany	Feeder	Number of	2002 SAIDI
Ranking	Ranking	Substation Identification	ID	Customers	Value
332		SA JACKSON ST	4685	2,751	3.80
333		NORTH ANGELO 12KV BUS	3125	1,520	3.60
334		VERNON	1520	821	3.60
335		WYLIE	6340	1,278	3.50
336		AB SHELTON ST	3145	926	3.40
330		AFTON	2310	287	3.40
338		TWILIGHT TRAIL	4285	1,395	3.40
339		WELLINGTON	3700	641	
339		ANSON 12KV	6630	417	3.40 3.30
340		SA AVENUE N	1655	547	3.30
341			5725	691	
		CHILDRESS 20TH ST			3.20
343		ELDORADO	1845	1,071	3.20
344			3300	629	3.20
345			3390	239	3.10
346		BALLINGER	4375	1,205	2.80
347		PADUCAH CITY	1935	422	2.80
348		AB VOGEL ST	4405	706	2.70
349		MENARD	3755	889	2.70
350		AB COUNTRY CLUB	4725	150	2.60
351		BALLINGER	4370	864	2.60
352		RANKIN	6400	282	2.40
353		AB CANYON ROCK	5025	40	2.30
354		AB EAST 12KV	4825	556	2.30
355		BRONTE	4160	371	2.30
356		SANTA ANNA	3420	267	2.30
357		SHAFTER	5110	50	2.30
358		BENJAMIN (BEPC)	5680	177	2.00
359		EDEN	3195	516	1.90
360		ANSON 12KV	6635	586	1.80
361		BRADSHAW (CLIMAX)	11301	43	1.80
362		IRAAN	4305	43	1.80
363		AB EAST 12KV	5760	1,086	1.70
364		WEINERT	6490	138	1.70
365	14	ACME BESTWALL	4150	25	1.30
366	289	GRAYBACK	3315	320	1.30
367	220	SA JACKSON ST	4250	215	1.30
368	360	AB VOGEL ST	4650	1,009	1.20
369	107	AB ELM CREEK	1825	771	1.00
370	375	TWILIGHT TRAIL	3150	482	1.00
371	401	VERNON CITY PLANT	5785	193	1.00
372	387	AB COUNTRY CLUB	4735	502	0.80
373	159	AB RAINEY CREEK	4225	243	0.80
374	70	AILEEN	6435	494	0.80
375		VERNON CITY PLANT	5840	91	0.60
376		AB ELM CREEK	4780	584	0.50
377		AB REBECCA LANE	6915	996	0.50
378		ASPERMONT	6640	94	0.50
379		HIGHLAND	6380	2,137	0.50

2002 SAIDI Ranking	2001 SAIDI Ranking	Substation Identification	Feeder ID	Number of Customers	2002 SAIDI Value
380	57	ROWENA	4480	136	0.50
381	191	SA AVENUE N	1975	438	0.50
382	146	COLLEGE HILLS	5520	212	0.40
383	78	SA WALNUT ST	3910	488	0.40
384	New	SPUR	411	279	0.30
385	163	AILEEN	4600	398	0.20
386	239	BEN FICKLIN	6185	589	0.20
387	188	COLLEGE HILLS	4835	296	0.20
388	382	MCCAMEY	3670	460	0.20
389	345	SPUR	414	279	0.20
390	74	ABILENE PLANT	1740	183	0.00
391	322	COLLEGE HILLS	5515	185	0.00
392	395	CROSS PLAINS	5130	61	0.00
393	351	FT DAVIS	6570	135	0.00
394	397	HAMLIN SHELL	6330	23	0.00
395	319	KNOX CITY	3985	17	0.0
396	398	PADUCAH REA (GBEC)	13	104	0.00
397	34	SA CONCHO	1725	30	0.00
398	296	SWENSON	136	35	0.00
399	264	TRUSCOTT	3845	43	0.0
400	335	VERNON CITY PLANT	5770	386	0.00
401	365	VERNON CITY PLANT	5835	92	0.00
402	403	WEINERT	3363	138	0.00

INTERRUPTION CAUSES

Provide the percentage of interruptions attributable to each cause.

2002 Reporting Year

Causes of Forced Interruptions	Percentage
Animals and Birds	15.23%
Other	3.43%
People	2.66%
Unknown	9.12%
Utility-owned Equipment	18.25%
Vegetation	10.39%
Weather (Including Lightning)	40.92%