



Empire District
A Liberty Utilities Company
Electric Utility System Reliability
Monitoring and Reporting Submission Requirements –
Annual Reliability Report
4 CSR 240-23.010

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Introduction

This report details Empire District's (Empire) annual reliability metrics and worst performing circuits for calendar year 2016 as required by Missouri Public Service Commission Rule 4 CSR 240-23.010, Electric Utility System Reliability Monitoring and Reporting Submission Requirements. This report will provide the reliability measures requested by the Rule, the list of Worst Performing Circuits (WPCs), the Multi-Year Worst Performing Circuits, and the actions taken or planned to improve the performance of these circuits.

Definitions

For the purpose of this report, the following definitions shall apply:

1. System Average Interruption Frequency Index (SAIFI) – how often the average customer experiences a sustained interruption over a predefined period of time.
2. Customer Average Interruption Frequency Index (CAIFI) – the average frequency of sustained interruptions for those customers experiencing sustained interruptions. The customer is counted once regardless of the number of times interrupted for this calculation.
3. System Average Interruption Duration Index (SAIDI) – the total duration of interruption for the average customer during a predefined period of time. SAIDI is measured in minutes.
4. Customer Average Interruption Duration Index (CAIDI) – the average time required to restore service. CAIDI is measured in minutes.
5. Worst Performing Circuit (WPC) – A distribution circuit whose SAIFI value, adjusted to exclude major events per IEEE Standard 1366-20012 when compared to the SAIFI values for the other circuits in the Empire system places it among the 5% of circuits with the highest SAIFI values in the Empire system.



2016 Multi-Year Worst Performing Circuits

Empire has identified one multi-year worst performing circuits in accordance with 4 CSR 240-23.010(8). To improve the performance of the circuits, Empire adopted a corrective action plan that includes the following activities:

- Empire employees perform a “walk-through” of the worst performing circuit collecting engineering data to support the following coordination study and sectionalizing program. Visually identifiable defects are noted and corrected as part of the corrective action plan.
- Upon walk-through completion, a coordination study of the circuit occurs. The coordination study evaluates protective equipment settings and application to ensure each protective device properly operates with other upstream and downstream protective equipment. Additional sectionalizing is then added to the circuit to reduce the number of customers experiencing an outage, in the event an outage occurs, thus increasing reliability to other customers on the circuit. Faulted circuit indicators are also added to the circuit to reduce restoration time and shorten customer outage duration.
- In addition to the coordination study and sectionalizing program, any vegetation related issues identified are scheduled to be cleared for each circuit.

The multi-year worst performing circuits are indicated in the chart below and are ranked according to their 2016 SAIFI value. A more detailed list of each circuit's corrective action will follow.

Multi-Year Worst Performing Circuits SAIFI 2014 - 2016				
Location	Circuit Number	2016	2015	2014
Forsyth - North	4102	2.69	3.408	3.396



Circuit: 4102

Area Served: Forsyth, Missouri

2016 SAIFI: 2.69

2015 SAIFI: 3.408

This circuit received a visual inspection in 2011, an infrared inspection in 2015, and a comprehensive intrusive inspection in 2016. A visual inspection is scheduled in 2019. The repair work identified as a result of the inspections will be completed in accordance with Empire's infrastructure inspection policy.

Vegetation clearing was performed in 2015 and is scheduled for a mid-cycle clearing in 2017. The circuit is also scheduled for regular maintenance in 2021.

A coordination study and sectionalizing corrective action program for circuit 4102 was completed in 2011 and is scheduled to complete a second sectionalizing corrective action program in 2017.

A portion of the overhead conductor is scheduled for replacement this year as part of Empire's Operation Toughen Up reliability initiative. The project will retire small copper conductor which has failed during momentary or permanent fault events occurring downstream on the circuit path. The failure generates a permanent fault or an additional faulted location delaying service restoration. Replacement of the conductor will eliminate this failure potential.

Empire re-evaluated the current sectionalization and protection coordination in 2016 and determined additional equipment is appropriate. Additional protective devices and fusing will be added in 2017. Empire will also continue to monitor the performance of circuit 4102 and evaluate cost effective solutions to further improve service reliability.



2016 Worst Performing Circuits

The table below lists the 2016 Worst Performing Circuits ranked according to their SAIFI value.

Worst Performing Circuits - System 2016 Measured by SAIFI										
Location	Circuit Number	Number Of Outages	Outage Hours Reported	Customer Outage Minutes	Customers Affected	Total Cust On Affected Circuits	AREA	SAIFI	SAIDI	CAIDI
Joplin - Southwest	3891	32	58.33	244105	2097	453	214	4.63	539.39	116.41
Wanda - South	3991	41	42.12	521613	2868	726	216	3.95	718.48	181.87
Joplin - West 7th Street	1454	17	25.62	208983	3248	935	214	3.47	223.54	64.34
Aurora - H.T.	1242	16	85.20	149747	2244	68	211	3.30	220.28	66.73
Neosho - East	3981	34	56.98	819966	4805	1503	216	3.20	545.55	170.65
Nixa - North	1141	15	24.46	229334	2852	902	217	3.16	254.16	80.41
Joplin - Northwest	1271	28	41.11	119289	2994	961	214	3.12	124.13	39.84
Webb City - Tom Street	1051	21	39.81	337670	3305	1067	215	3.10	316.47	102.17
Joplin - Northeast	1282	23	41.16	365886	3068	1035	214	2.97	353.63	119.26
Joplin - Southwest	3892	7	35.49	446164	1475	500	214	2.95	891.73	302.48
Sarcoxie - Southwest	3621	21	26.79	255630	4579	1560	211	2.94	163.92	55.83
Forsyth - North	4102	39	36.35	277960	2428	902	209	2.69	307.99	114.48
Strafford	3701	16	23.12	128600	1273	485	217	2.63	265.40	101.02
Webb City - Tom Street	1050	44	57.90	415765	1596	4172	215	2.61	260.53	99.66



Circuit: 3891

Area Served: Joplin, Missouri

2016 SAIFI: 4.63

This circuit received an infrared inspection in 2014 and a comprehensive intrusive inspection in 2015. The circuit is scheduled to receive a visual inspection in 2020. The repair work identified as a result of the inspections will be completed in accordance with Empire's infrastructure inspection policy.

Vegetation clearing was performed in 2014 and is scheduled again for 2017.

A coordination study and sectionalizing corrective action program was completed in 2015.

Circuit: 3991

Area Served: Neosho, Missouri

2016 SAIFI: 3.95

This circuit received an infrared inspection in 2013 and comprehensive intrusive inspection in 2016. This circuit is scheduled to receive a visual inspection in 2020. The repair work identified as a result of the inspections will be completed in accordance with Empire's infrastructure inspection policy.

Vegetation clearing was performed in 2015 and is scheduled again for 2017.

A coordination study and sectionalizing corrective action program was performed in 2011.

Circuit: 1454

Area Served: Joplin, Missouri

2016 SAIFI: 3.47

This circuit received an infrared inspection in 2013 and a comprehensive intrusive inspection in 2015. This circuit is scheduled to receive a visual inspection in 2017. The repair work identified as a result of the inspections will be completed in accordance with Empire's infrastructure inspection policy.

Vegetation clearing was performed in 2015 and is scheduled again for 2017.

A coordination study and sectionalizing corrective action program is scheduled for completion in 2015.

**Circuit: 1242****Area Served: Aurora, Missouri****2016 SAIFI: 3.30**

This circuit received an infrared inspection in 2015. This circuit is scheduled to receive a visual inspection in 2017 and a comprehensive intrusive inspection in 2018. The repair work identified as a result of the inspections will be completed in accordance with Empire's infrastructure inspection policy.

Vegetation clearing was performed in 2015 and is scheduled again for 2017.

Circuit: 3981**Area Served: Neosho, Missouri****2016 SAIFI: 3.20**

This circuit received an infrared inspection in 2013. This circuit is scheduled to receive a visually inspection in 2017 and a comprehensive intrusive inspection in 2018. The repair work identified as a result of the inspections will be completed in accordance with Empire's infrastructure inspection policy.

Vegetation clearing was performed in 2016 and is scheduled again for 2019.

A coordination study and sectionalizing corrective action program was performed in 2011.

Circuit: 1141**Area Served: Nixa, Missouri****2016 SAIFI: 3.16**

This circuit received a comprehensive intrusive inspection in 2009 and a visual inspection in 2014. This circuit will receive an infrared inspected in 2018. The repair work identified as a result of the inspections will be completed in accordance with Empire's infrastructure inspection policy.

Vegetation clearing was performed in 2016 and is scheduled again for 2020.

A coordination study and sectionalizing corrective action program was performed in 2013.

**Circuit: 1271****Area Served: Joplin, Missouri****2016 SAIFI: 3.12**

This circuit received a visual inspection in 2010, a comprehensive intrusive inspection in 2012, and an infrared inspection in 2016. This circuit is scheduled to receive its next visual inspection in 2022. The repair work identified as a result of the inspections will be completed in accordance with Empire's infrastructure inspection policy.

Vegetation clearing was performed in 2014 and is scheduled for a mid-cycle clearing in 2017. The circuit is also scheduled for regular maintenance in 2020.

A coordination study and sectionalizing corrective action program was performed in 2011.

Circuit: 1051**Area Served: Webb City, Missouri****2016 SAIFI: 3.10**

This circuit received a comprehensive intrusive inspection in 2011, an infrared inspection in 2015 and a visual inspection in 2015. This circuit is scheduled to receive its next comprehensive intrusive inspection in 2022 and a visual inspection in 2019. The repair work identified as a result of the inspections will be completed in accordance with Empire's infrastructure inspection policy.

Vegetation clearing was performed in 2015 and is scheduled again for 2017.

A coordination study and sectionalizing corrective action program was performed in 2013.

Circuit: 1282**Area Served: Joplin, Missouri****2016 SAIFI: 2.97**

This circuit received an infrared inspection in 2011, a comprehensive intrusive inspection in 2012 and a visual inspection in 2015. An infrared inspection is scheduled in 2019. The repair work identified as a result of the inspections will be completed in accordance with Empire's infrastructure inspection policy.

Vegetation clearing was performed in 2015 and is scheduled again for 2017.

A coordination study and sectionalizing corrective action program was performed in 2014.

**Circuit: 3892****Area Served: Joplin, Missouri****2016 SAIFI: 2.95**

This circuit received a visual inspection in 2009, an infrared inspection in 2015, and a comprehensive intrusive inspection in 2016. A visual inspection is scheduled for 2021. The repair work identified as a result of the inspections will be completed in accordance with Empire's infrastructure inspection policy.

Vegetation clearing was performed in 2015 and is scheduled again for 2018.

A coordination study and sectionalizing corrective action program is scheduled for 2018.

Circuit: 3621**Area Served: Sarcoxie, Missouri****2016 SAIFI: 2.94**

This circuit received an infrared inspection in 2011. This circuit is scheduled to receive a visual inspection in 2017 and a comprehensive intrusive inspection in 2028. The repair work identified as a result of the inspections will be completed in accordance with Empire's infrastructure inspection policy.

Vegetation clearing was performed in 2015 and is scheduled for a mid-cycle clearing in 2018. The circuit is also scheduled for regular maintenance in 2021.

A coordination study and sectionalizing corrective action program was performed in 2010.



Circuit: 4102

Area Served: Forsyth, Missouri

2016 SAIFI: 2.69

2015 SAIFI: 3.408

This circuit received a visual inspection in 2011, an infrared inspection in 2015, and a comprehensive intrusive inspection in 2016. A visual inspection is scheduled in 2019. The repair work identified as a result of the inspections will be completed in accordance with Empire's infrastructure inspection policy.

Vegetation clearing was performed in 2015 and is scheduled for a mid-cycle clearing in 2017. The circuit is also scheduled for regular maintenance in 2021.

A coordination study and sectionalizing corrective action program for circuit 4102 was completed in 2011 and is scheduled to complete a second sectionalizing corrective action program in 2017.

A portion of the overhead conductor is scheduled for replacement this year as part of Empire's Operation Toughen Up reliability initiative. The project will retire small copper conductor which has failed during momentary or permanent fault events occurring downstream on the circuit path. The failure generates a permanent fault or an additional faulted location delaying service restoration. Replacement of the conductor will eliminate this failure potential.

Empire re-evaluated the current sectionalization and protection coordination in 2016 and determined additional equipment is appropriate. Additional protective devices and fusing will be added in 2017. Empire will also continue to monitor the performance of circuit 4102 and evaluate cost effective solutions to further improve service reliability.

Circuit: 3701

Area Served: Strafford, Missouri

2016 SAIFI: 2.63

This circuit received a comprehensive intrusive inspection in 2014 and received a visual inspection in 2014. This circuit is scheduled to receive an infrared inspection in 2020. The repair work identified as a result of the inspections will be completed in accordance with Empire's infrastructure inspection policy.

Mid-cycle vegetation clearing was performed in 2014 and regular maintenance is scheduled in 2017.



Circuit: 1050

Area Served: Webb City, Missouri

2016 SAIFI: 2.61

This circuit received a comprehensive intrusive inspection in 2010, received a visual inspection in 2012, and an infrared inspection in 2016. This circuit is scheduled to receive its next visual inspection in 2020. The repair work identified as a result of the inspections will be completed in accordance with Empire's infrastructure inspection policy.

Mid-cycle vegetation clearing is scheduled to be performed in 2016 and regular maintenance is scheduled in 2018.

THE EMPIRE DISTRICT ELECTRIC COMPANY
CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI
 1/1/2016 to 1/31/2016
 INCLUDING MAJOR EVENT DAYS

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1050	3	3.39	146	6,113	1,588	0.092	41.87	3.85	1.014	0.99991
1051	3	4.95	1,995	159,895	1,067	1.870	80.15	149.85	14.353	0.99664
1052	2	1.24	195	2,126	1,162	0.168	10.90	1.83	1.005	0.99996
1082	2	2.50	2	150	1,325	0.002	75.00	0.11	1.000	0.99999
1091	1	4.43	712	189,392	713	0.999	266.00	265.63	1.000	0.99405
1092	2	5.10	2	306	967	0.002	153.00	0.32	1.000	0.99999
1094	1	1.65	1	99	1,232	0.001	99.00	0.08	1.000	0.99999
1141	2	2.88	39	3,170	902	0.043	81.28	3.51	1.026	0.99992
1142	1	7.22	6	2,600	215	0.028	433.33	12.09	1.000	0.99973
1211	1	1.58	1	95	1,480	0.001	95.00	0.06	1.000	0.99999
1212	1	2.12	1	127	330	0.003	127.00	0.38	1.000	0.99999
1213	1	3.05	1	183	550	0.002	183.00	0.33	1.000	0.99999
1232	1	3.00	1	180	1,178	0.001	180.00	0.15	1.000	0.99999
1241	1	0.83	15	760	848	0.018	50.67	0.90	1.000	0.99998
1243	1	2.03	1	122	1,196	0.001	122.00	0.10	1.000	0.99999
1273	1	0.90	61	3,325	864	0.071	54.51	3.85	1.000	0.99991
1281	1	1.98	164	19,589	165	0.994	119.45	118.72	1.000	0.99734

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1282	9	11.45	2,826	327,938	2,200	1.285	116.04	149.06	1.285	0.99288
1284	3	3.60	66	4,780	890	0.074	72.42	5.37	1.000	0.99988
1285	1	2.12	1	127	1,089	0.001	127.00	0.12	1.000	0.99999
1311	1	2.38	1	143	273	0.004	143.00	0.52	1.000	0.99999
1312	1	2.27	1	136	931	0.001	136.00	0.15	1.000	0.99999
1452	5	12.46	10	1,159	448	0.022	115.90	2.59	1.111	0.99994
1453	2	4.72	16	3,411	1,786	0.009	213.19	1.91	1.000	0.99996
1454	3	2.15	1,547	77,711	2,052	0.754	50.23	37.87	1.010	0.99814
1523	1	0.58	22	772	720	0.031	35.09	1.07	1.000	0.99998
2091	1	1.15	15	1,041	876	0.017	69.40	1.19	1.000	0.99997
2171	2	3.03	2	182	690	0.003	91.00	0.26	1.000	0.99999
2212	1	1.75	1	105	1,290	0.001	105.00	0.08	1.000	0.99999
2511	1	1.73	1	104	619	0.002	104.00	0.17	1.000	0.99999
2621	1	1.43	1	86	1,165	0.001	86.00	0.07	1.000	0.99999
2961	1	0.97	7	409	646	0.011	58.43	0.63	1.000	0.99999
2962	1	0.78	257	12,224	256	1.004	47.56	47.75	1.000	0.99893
3122	2	4.84	13	1,296	847	0.015	99.69	1.53	1.083	0.99997
3221	1	0.77	1	46	1,238	0.001	46.00	0.04	1.000	0.99999
3231	1	1.18	1	71	413	0.002	71.00	0.17	1.000	0.99999
3232	1	1.43	1	86	430	0.002	86.00	0.20	1.000	0.99999
3302	2	3.13	2	188	898	0.002	94.00	0.21	1.000	0.99999
3303	1	0.93	16	902	979	0.016	56.38	0.92	1.000	0.99998

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3314	2	4.14	45	4,423	220	0.205	98.29	20.10	1.000	0.99955
3423	1	3.52	3	633	386	0.008	211.00	1.64	1.000	0.99996
3472	1	0.93	27	1,533	1,577	0.017	56.78	0.97	1.000	0.99998
3621	3	4.69	3	282	1,560	0.002	94.00	0.18	1.000	0.99999
3662	1	5.03	1	302	778	0.001	302.00	0.39	1.000	0.99999
3663	1	0.48	68	1,993	791	0.086	29.31	2.52	1.000	0.99994
3664	1	1.97	1	118	518	0.002	118.00	0.23	1.000	0.99999
3702	1	2.22	1	133	609	0.002	133.00	0.22	1.000	0.99999
3751	1	0.57	20	690	880	0.023	34.50	0.78	1.000	0.99998
3891	6	12.22	536	53,158	450	1.191	99.18	118.13	1.196	0.99735
3892	5	21.99	980	407,137	500	1.960	415.45	814.27	2.012	0.98176
3893	1	2.12	1,107	140,589	1,108	0.999	127.00	126.89	1.000	0.99716
3894	6	12.44	150	17,928	116	1.293	119.52	154.55	1.293	0.99654
3901	1	0.65	1	39	881	0.001	39.00	0.04	1.000	0.99999
3912	1	1.17	1,125	79,237	1,132	0.994	70.43	70.00	1.000	0.99843
3913	2	1.59	7	449	809	0.009	64.14	0.56	1.000	0.99999
3914	1	0.57	1	34	371	0.003	34.00	0.09	1.000	0.99999
3951	1	1.00	28	1,686	924	0.030	60.21	1.82	1.000	0.99996
3952	1	0.60	68	2,488	1,262	0.054	36.59	1.97	1.000	0.99996
3981	1	0.52	12	383	1,501	0.008	31.92	0.26	1.000	0.99999
3982	1	1.48	1	89	1,766	0.001	89.00	0.05	1.000	0.99999
3992	1	0.77	6	277	166	0.036	46.17	1.67	1.000	0.99996

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
403	1	0.80	1	48	267	0.004	48.00	0.18	1.000	0.99999
4091	1	0.58	11	389	1,145	0.010	35.36	0.34	1.000	0.99999
4101	2	5.72	22	3,814	584	0.038	173.36	6.53	1.000	0.99985
4138	1	0.97	1	58	740	0.001	58.00	0.08	1.000	0.99999
4141	1	1.35	1	81	82	0.012	81.00	0.99	1.000	0.99998
4152	1	1.77	2	212	816	0.002	106.00	0.26	1.000	0.99999
4153	1	2.38	32	4,576	1,310	0.024	143.00	3.49	1.000	0.99992
4171	1	0.70	6	256	676	0.009	42.67	0.38	1.000	0.99999
4172	2	2.82	2	169	1,717	0.001	84.50	0.10	1.000	0.99999
4182	1	0.57	1	34	1,018	0.001	34.00	0.03	1.000	0.99999
4212	1	1.53	369	33,948	816	0.452	92.00	41.60	1.000	0.99907
4222	1	1.82	1	109	1,042	0.001	109.00	0.10	1.000	0.99999
4324	3	4.92	3	295	1,250	0.002	98.33	0.24	1.000	0.99999
4341	1	0.53	1	32	1,780	0.001	32.00	0.02	1.000	0.99999
4361	2	1.02	60	1,675	794	0.076	27.92	2.11	1.000	0.99995
4362	1	0.60	29	1,051	827	0.035	36.24	1.27	1.000	0.99997
4363	3	1.81	31	1,075	1,654	0.019	34.68	0.65	1.000	0.99999
4371	2	1.78	17	434	1,540	0.011	25.53	0.28	1.000	0.99999
4372	2	2.30	30	2,202	440	0.068	73.40	5.00	1.034	0.99989
4373	1	1.93	1	116	774	0.001	116.00	0.15	1.000	0.99999
4431	3	3.21	3	193	1,384	0.002	64.33	0.14	1.000	0.99999
4601	1	2.00	1	120	413	0.002	120.00	0.29	1.000	0.99999

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CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4692	1	1.17	1	70	468	0.002	70.00	0.15	1.000	0.99999
5601	2	1.39	47	2,305	1,158	0.041	49.04	1.99	1.000	0.99996
5603	4	4.56	135	10,760	1,288	0.105	79.70	8.35	1.023	0.99981
5902	1	1.18	1	71	1,008	0.001	71.00	0.07	1.000	0.99999
5903	2	2.47	2	148	238	0.008	74.00	0.62	2.000	0.99999
5905	1	0.48	1	29	1,867	0.001	29.00	0.02	1.000	0.99999
6142	1	0.37	1	22	308	0.003	22.00	0.07	1.000	0.99999
6143	1	0.87	11	581	371	0.030	52.82	1.57	1.000	0.99996
	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUSTOMERS SERVED	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
Total:	153	247.97	13,166	1,599,623	164,322	0.080	121.50	9.73	1.311	0.99978

THE EMPIRE DISTRICT ELECTRIC COMPANY
CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI

1/1/2016 to 1/31/2016

EXCLUDING MAJOR EVENT DAYS

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1050	3	3.39	146	6,113	1,588	0.092	41.87	3.85	1.014	0.99991
1051	3	4.95	1,995	159,895	1,067	1.870	80.15	149.85	14.353	0.99664
1052	2	1.24	195	2,126	1,162	0.168	10.90	1.83	1.005	0.99996
1082	2	2.50	2	150	1,325	0.002	75.00	0.11	1.000	0.99999
1091	1	4.43	712	189,392	713	0.999	266.00	265.63	1.000	0.99405
1092	2	5.10	2	306	967	0.002	153.00	0.32	1.000	0.99999
1094	1	1.65	1	99	1,232	0.001	99.00	0.08	1.000	0.99999
1141	2	2.88	39	3,170	902	0.043	81.28	3.51	1.026	0.99992
1142	1	7.22	6	2,600	215	0.028	433.33	12.09	1.000	0.99973
1211	1	1.58	1	95	1,480	0.001	95.00	0.06	1.000	0.99999
1212	1	2.12	1	127	330	0.003	127.00	0.38	1.000	0.99999
1213	1	3.05	1	183	550	0.002	183.00	0.33	1.000	0.99999
1232	1	3.00	1	180	1,178	0.001	180.00	0.15	1.000	0.99999
1241	1	0.83	15	760	848	0.018	50.67	0.90	1.000	0.99998
1243	1	2.03	1	122	1,196	0.001	122.00	0.10	1.000	0.99999
1273	1	0.90	61	3,325	864	0.071	54.51	3.85	1.000	0.99991
1281	1	1.98	164	19,589	165	0.994	119.45	118.72	1.000	0.99734

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1282	9	11.45	2,826	327,938	2,200	1.285	116.04	149.06	1.285	0.99288
1284	3	3.60	66	4,780	890	0.074	72.42	5.37	1.000	0.99988
1285	1	2.12	1	127	1,089	0.001	127.00	0.12	1.000	0.99999
1311	1	2.38	1	143	273	0.004	143.00	0.52	1.000	0.99999
1312	1	2.27	1	136	931	0.001	136.00	0.15	1.000	0.99999
1452	5	12.46	10	1,159	448	0.022	115.90	2.59	1.111	0.99994
1453	2	4.72	16	3,411	1,786	0.009	213.19	1.91	1.000	0.99996
1454	3	2.15	1,547	77,711	2,052	0.754	50.23	37.87	1.010	0.99814
1523	1	0.58	22	772	720	0.031	35.09	1.07	1.000	0.99998
2091	1	1.15	15	1,041	876	0.017	69.40	1.19	1.000	0.99997
2171	2	3.03	2	182	690	0.003	91.00	0.26	1.000	0.99999
2212	1	1.75	1	105	1,290	0.001	105.00	0.08	1.000	0.99999
2511	1	1.73	1	104	619	0.002	104.00	0.17	1.000	0.99999
2621	1	1.43	1	86	1,165	0.001	86.00	0.07	1.000	0.99999
2961	1	0.97	7	409	646	0.011	58.43	0.63	1.000	0.99999
2962	1	0.78	257	12,224	256	1.004	47.56	47.75	1.000	0.99893
3122	2	4.84	13	1,296	847	0.015	99.69	1.53	1.083	0.99997
3221	1	0.77	1	46	1,238	0.001	46.00	0.04	1.000	0.99999
3231	1	1.18	1	71	413	0.002	71.00	0.17	1.000	0.99999
3232	1	1.43	1	86	430	0.002	86.00	0.20	1.000	0.99999
3302	2	3.13	2	188	898	0.002	94.00	0.21	1.000	0.99999
3303	1	0.93	16	902	979	0.016	56.38	0.92	1.000	0.99998

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3314	2	4.14	45	4,423	220	0.205	98.29	20.10	1.000	0.99955
3423	1	3.52	3	633	386	0.008	211.00	1.64	1.000	0.99996
3472	1	0.93	27	1,533	1,577	0.017	56.78	0.97	1.000	0.99998
3621	3	4.69	3	282	1,560	0.002	94.00	0.18	1.000	0.99999
3662	1	5.03	1	302	778	0.001	302.00	0.39	1.000	0.99999
3663	1	0.48	68	1,993	791	0.086	29.31	2.52	1.000	0.99994
3664	1	1.97	1	118	518	0.002	118.00	0.23	1.000	0.99999
3702	1	2.22	1	133	609	0.002	133.00	0.22	1.000	0.99999
3751	1	0.57	20	690	880	0.023	34.50	0.78	1.000	0.99998
3891	6	12.22	536	53,158	450	1.191	99.18	118.13	1.196	0.99735
3892	5	21.99	980	407,137	500	1.960	415.45	814.27	2.012	0.98176
3893	1	2.12	1,107	140,589	1,108	0.999	127.00	126.89	1.000	0.99716
3894	6	12.44	150	17,928	116	1.293	119.52	154.55	1.293	0.99654
3901	1	0.65	1	39	881	0.001	39.00	0.04	1.000	0.99999
3912	1	1.17	1,125	79,237	1,132	0.994	70.43	70.00	1.000	0.99843
3913	2	1.59	7	449	809	0.009	64.14	0.56	1.000	0.99999
3914	1	0.57	1	34	371	0.003	34.00	0.09	1.000	0.99999
3951	1	1.00	28	1,686	924	0.030	60.21	1.82	1.000	0.99996
3952	1	0.60	68	2,488	1,262	0.054	36.59	1.97	1.000	0.99996
3981	1	0.52	12	383	1,501	0.008	31.92	0.26	1.000	0.99999
3982	1	1.48	1	89	1,766	0.001	89.00	0.05	1.000	0.99999
3992	1	0.77	6	277	166	0.036	46.17	1.67	1.000	0.99996

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
403	1	0.80	1	48	267	0.004	48.00	0.18	1.000	0.99999
4091	1	0.58	11	389	1,145	0.010	35.36	0.34	1.000	0.99999
4101	2	5.72	22	3,814	584	0.038	173.36	6.53	1.000	0.99985
4138	1	0.97	1	58	740	0.001	58.00	0.08	1.000	0.99999
4141	1	1.35	1	81	82	0.012	81.00	0.99	1.000	0.99998
4152	1	1.77	2	212	816	0.002	106.00	0.26	1.000	0.99999
4153	1	2.38	32	4,576	1,310	0.024	143.00	3.49	1.000	0.99992
4171	1	0.70	6	256	676	0.009	42.67	0.38	1.000	0.99999
4172	2	2.82	2	169	1,717	0.001	84.50	0.10	1.000	0.99999
4182	1	0.57	1	34	1,018	0.001	34.00	0.03	1.000	0.99999
4212	1	1.53	369	33,948	816	0.452	92.00	41.60	1.000	0.99907
4222	1	1.82	1	109	1,042	0.001	109.00	0.10	1.000	0.99999
4324	3	4.92	3	295	1,250	0.002	98.33	0.24	1.000	0.99999
4341	1	0.53	1	32	1,780	0.001	32.00	0.02	1.000	0.99999
4361	2	1.02	60	1,675	794	0.076	27.92	2.11	1.000	0.99995
4362	1	0.60	29	1,051	827	0.035	36.24	1.27	1.000	0.99997
4363	3	1.81	31	1,075	1,654	0.019	34.68	0.65	1.000	0.99999
4371	2	1.78	17	434	1,540	0.011	25.53	0.28	1.000	0.99999
4372	2	2.30	30	2,202	440	0.068	73.40	5.00	1.034	0.99989
4373	1	1.93	1	116	774	0.001	116.00	0.15	1.000	0.99999
4431	3	3.21	3	193	1,384	0.002	64.33	0.14	1.000	0.99999
4601	1	2.00	1	120	413	0.002	120.00	0.29	1.000	0.99999

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CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4692	1	1.17	1	70	468	0.002	70.00	0.15	1.000	0.99999
5601	2	1.39	47	2,305	1,158	0.041	49.04	1.99	1.000	0.99996
5603	4	4.56	135	10,760	1,288	0.105	79.70	8.35	1.023	0.99981
5902	1	1.18	1	71	1,008	0.001	71.00	0.07	1.000	0.99999
5903	2	2.47	2	148	238	0.008	74.00	0.62	2.000	0.99999
5905	1	0.48	1	29	1,867	0.001	29.00	0.02	1.000	0.99999
6142	1	0.37	1	22	308	0.003	22.00	0.07	1.000	0.99999
6143	1	0.87	11	581	371	0.030	52.82	1.57	1.000	0.99996
	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUSTOMERS SERVED	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
Total:	153	247.97	13,166	1,599,623	164,322	0.080	121.50	9.73	1.311	0.99978

THE EMPIRE DISTRICT ELECTRIC COMPANY
CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI
 10/1/2016 to 10/31/2016
 INCLUDING MAJOR EVENT DAYS

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1050	3	3.39	123	8,188	1,597	0.077	66.57	5.13	1.000	0.99989
1051	4	8.09	30	3,336	1,067	0.028	111.20	3.13	1.034	0.99993
1052	2	1.69	148	7,029	1,162	0.127	47.49	6.05	1.000	0.99986
1081	2	2.78	24	2,051	18	1.333	85.46	113.94	1.333	0.99745
1082	7	12.67	1,422	195,918	1,330	1.069	137.78	147.31	1.072	0.99670
1091	2	4.88	2	293	716	0.003	146.50	0.41	1.000	0.99999
1092	2	3.86	2	232	971	0.002	116.00	0.24	1.000	0.99999
1102	1	1.08	15	940	465	0.032	62.67	2.02	1.000	0.99995
1211	3	3.22	124	12,118	1,479	0.084	97.73	8.19	1.117	0.99982
1212	1	1.80	1	108	332	0.003	108.00	0.33	1.000	0.99999
1230	3	2.45	3	147	1,179	0.003	49.00	0.12	1.000	0.99999
1232	1	1.55	1	93	1,183	0.001	93.00	0.08	1.000	0.99999
1233	2	0.45	2	27	640	0.003	13.50	0.04	1.000	0.99999
1242	2	2.45	30	1,275	680	0.044	42.50	1.88	1.000	0.99996
1243	1	0.72	2	87	1,199	0.002	43.50	0.07	1.000	0.99999
1263	2	2.29	77	5,277	1,132	0.068	68.53	4.66	1.000	0.99990
1264	2	2.43	2	146	18	0.111	73.00	8.11	1.000	0.99982

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1265	4	3.61	54	1,731	1,282	0.042	32.06	1.35	1.000	0.99997
1271	2	1.84	20	1,165	962	0.021	58.25	1.21	1.053	0.99997
1272	1	0.80	3	144	14	0.214	48.00	10.29	1.000	0.99977
1273	2	2.07	10	652	865	0.012	65.20	0.75	1.000	0.99998
1282	1	0.77	1	46	1,035	0.001	46.00	0.04	1.000	0.99999
1284	6	6.12	63	3,040	948	0.066	48.25	3.21	1.000	0.99993
1285	3	10.23	43	11,012	1,094	0.039	256.09	10.07	1.000	0.99977
1311	1	1.15	5	345	272	0.018	69.00	1.27	1.000	0.99997
1312	2	2.19	265	20,959	934	0.284	79.09	22.44	1.011	0.99950
1453	8	9.95	173	16,789	1,797	0.096	97.05	9.34	1.030	0.99979
1454	1	0.60	1	36	935	0.001	36.00	0.04	1.000	0.99999
1455	1	0.87	1	52	389	0.003	52.00	0.13	1.000	0.99999
1521	2	3.37	9	1,135	361	0.025	126.11	3.14	1.125	0.99993
1523	3	2.85	14	764	723	0.019	54.57	1.06	1.167	0.99998
1841	3	3.16	33	2,237	649	0.051	67.79	3.45	1.000	0.99992
1842	1	0.93	281	15,871	280	1.004	56.48	56.68	1.004	0.99873
1843	4	4.80	4	288	1,085	0.004	72.00	0.27	1.000	0.99999
2211	3	4.75	27	2,427	723	0.037	89.89	3.36	1.000	0.99992
2212	5	8.83	1,321	94,625	1,296	1.019	71.63	73.01	1.442	0.99836
2491	1	2.68	1	161	63	0.016	161.00	2.56	1.000	0.99994
2511	1	0.60	618	22,721	618	1.000	36.77	36.77	1.000	0.99918
2921	1	0.88	11	591	375	0.029	53.73	1.58	1.000	0.99996

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
2961	2	2.53	30	1,369	648	0.046	45.63	2.11	1.000	0.99995
3121	1	2.22	1	133	1,131	0.001	133.00	0.12	1.000	0.99999
3123	1	1.15	10	696	702	0.014	69.60	0.99	1.000	0.99998
3222	3	6.20	12	962	770	0.016	80.17	1.25	1.091	0.99997
3303	3	3.21	116	7,172	979	0.118	61.83	7.33	1.009	0.99984
3311	1	1.92	6	634	534	0.011	105.67	1.19	1.000	0.99997
3314	1	4.23	1	254	222	0.005	254.00	1.14	1.000	0.99997
3422	2	4.23	34	3,049	971	0.035	89.68	3.14	1.000	0.99993
3423	1	0.73	1	44	386	0.003	44.00	0.11	1.000	0.99999
3472	2	1.70	124	4,565	1,579	0.079	36.81	2.89	1.000	0.99994
3551	2	1.18	130	4,654	1,038	0.125	35.80	4.48	1.000	0.99990
3552	1	0.60	1	36	575	0.002	36.00	0.06	1.000	0.99999
3553	3	2.94	242	17,094	1,041	0.232	70.64	16.42	1.004	0.99963
3591	4	5.82	61	3,938	1,206	0.051	64.56	3.27	1.017	0.99993
3592	4	5.77	291	36,139	1,741	0.167	124.19	20.76	1.062	0.99953
3593	3	9.67	57	8,146	929	0.061	142.91	8.77	1.000	0.99980
3621	1	0.63	2	77	1,558	0.001	38.50	0.05	1.000	0.99999
3661	5	5.59	2,085	81,337	1,027	2.030	39.01	79.20	2.028	0.99823
3662	3	2.39	16	714	778	0.021	44.63	0.92	1.067	0.99998
3664	2	2.11	44	2,864	514	0.086	65.09	5.57	1.023	0.99988
3671	1	0.97	503	29,576	503	1.000	58.80	58.80	1.000	0.99868
3672	1	0.85	137	6,987	137	1.000	51.00	51.00	1.000	0.99886

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3675	1	0.78	1	47	415	0.002	47.00	0.11	1.000	0.99999
3701	1	4.33	22	5,729	484	0.045	260.41	11.84	1.000	0.99973
3702	3	1.97	21	525	611	0.034	25.00	0.86	1.000	0.99998
3751	1	1.18	48	3,437	881	0.054	71.60	3.90	1.000	0.99991
3872	1	0.50	13	401	1,067	0.012	30.85	0.38	1.000	0.99999
3878	1	0.63	1	38	1,139	0.001	38.00	0.03	1.000	0.99999
3891	5	4.25	795	53,819	454	1.751	67.70	118.54	7.162	0.99734
3893	6	9.94	6	596	1,111	0.005	99.33	0.54	1.000	0.99999
3894	1	3.62	1	217	116	0.009	217.00	1.87	1.000	0.99996
3901	1	0.67	56	2,286	877	0.064	40.82	2.61	1.000	0.99994
3912	1	1.62	38	3,656	1,160	0.033	96.21	3.15	1.000	0.99993
3914	1	0.57	1	34	373	0.003	34.00	0.09	1.000	0.99999
3951	2	1.70	41	1,977	928	0.044	48.22	2.13	1.000	0.99995
3952	8	9.10	38	2,639	1,273	0.030	69.45	2.07	1.000	0.99995
3953	9	9.58	14	917	522	0.027	65.50	1.76	1.077	0.99996
3981	5	9.20	1,533	361,046	1,503	1.020	235.52	240.22	1.020	0.99462
3991	3	2.58	36	2,745	726	0.050	76.25	3.78	1.059	0.99992
4031	3	5.63	70	8,746	704	0.099	124.94	12.42	1.061	0.99972
404	1	0.55	22	736	169	0.130	33.45	4.36	1.000	0.99990
4091	2	3.18	25	2,666	1,148	0.022	106.64	2.32	1.000	0.99995
4092	1	1.55	7	654	434	0.016	93.43	1.51	1.000	0.99997
4102	2	1.71	91	6,091	903	0.101	66.93	6.75	1.000	0.99985

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4133	1	0.67	9	364	640	0.014	40.44	0.57	1.000	0.99999
4137	2	2.06	23	985	794	0.029	42.83	1.24	1.045	0.99997
4151	1	1.78	31	3,322	1,246	0.025	107.16	2.67	1.000	0.99994
4152	1	0.47	37	1,054	822	0.045	28.49	1.28	1.000	0.99997
4153	1	1.88	1	113	1,284	0.001	113.00	0.09	1.000	0.99999
4154	1	1.33	1	80	1,209	0.001	80.00	0.07	1.000	0.99999
4172	5	6.98	116	6,801	1,724	0.067	58.63	3.94	1.018	0.99991
4181	2	2.75	16	1,565	492	0.033	97.81	3.18	1.067	0.99993
4182	1	0.32	48	926	1,023	0.047	19.29	0.91	1.000	0.99998
4211	1	1.23	89	6,624	707	0.126	74.43	9.37	1.000	0.99979
4223	1	0.82	1	49	826	0.001	49.00	0.06	1.000	0.99999
4224	2	2.10	28	1,885	753	0.037	67.32	2.50	1.077	0.99994
4302	1	0.43	1	26	651	0.002	26.00	0.04	1.000	0.99999
4303	1	1.87	1	112	982	0.001	112.00	0.11	1.000	0.99999
4312	2	0.85	82	2,172	844	0.097	26.49	2.57	1.012	0.99994
4313	2	2.37	6	496	320	0.019	82.67	1.55	1.000	0.99997
4324	1	2.07	1	124	1,253	0.001	124.00	0.10	1.000	0.99999
4333	1	1.28	1	77	683	0.001	77.00	0.11	1.000	0.99999
4341	3	3.14	15	970	1,783	0.008	64.67	0.54	1.000	0.99999
4343	1	0.70	98	4,135	1,025	0.096	42.19	4.03	1.000	0.99991
4361	1	1.48	1,707	152,150	2,259	0.755	89.13	67.35	1.000	0.99572
4362	1	2.62	71	11,214	828	0.086	157.94	13.54	1.000	0.99970

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4363	6	10.27	2,183	90,037	1,662	1.313	41.24	54.17	1.313	0.99879
4371	3	2.15	24	1,582	1,543	0.016	65.92	1.03	1.000	0.99998
4372	2	3.14	6	459	440	0.014	76.50	1.04	1.000	0.99998
4373	1	1.35	1	81	776	0.001	81.00	0.10	1.000	0.99999
4381	1	0.77	1	46	333	0.003	46.00	0.14	1.000	0.99999
4386	1	3.50	153	32,017	1,653	0.093	209.26	19.37	1.000	0.99957
4431	5	7.65	49	5,189	1,386	0.035	105.90	3.74	1.043	0.99992
4432	2	4.10	30	3,788	462	0.065	126.27	8.20	1.034	0.99982
4511	3	4.40	28	1,686	1,132	0.025	60.21	1.49	1.037	0.99997
4512	1	0.65	1	39	1,014	0.001	39.00	0.04	1.000	0.99999
457	1	2.40	1	144	179	0.006	144.00	0.80	1.000	0.99998
4601	1	0.70	1	42	415	0.002	42.00	0.10	1.000	0.99999
4602	4	5.38	32	2,600	948	0.034	81.25	2.74	1.032	0.99994
4692	2	2.50	2	150	470	0.004	75.00	0.32	1.000	0.99999
4693	5	3.61	157	9,228	153	1.026	58.78	60.31	1.026	0.99865
5601	3	1.67	56	2,447	1,164	0.048	43.70	2.10	1.000	0.99995
5603	1	1.42	13	1,048	1,288	0.010	80.62	0.81	1.000	0.99998
5901	1	1.02	54	3,330	676	0.080	61.67	4.93	1.000	0.99989
5902	2	3.70	13	614	1,012	0.013	47.23	0.61	1.000	0.99999
5904	2	1.25	82	3,150	1,223	0.067	38.41	2.58	2.000	0.99994
5905	1	0.98	20	1,143	1,875	0.011	57.15	0.61	1.000	0.99999
6021	7	6.27	66	2,611	1,275	0.052	39.56	2.05	1.065	0.99995

HIGHLY CONFIDENTIAL

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUSTOMERS SERVED	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
Total:	290	378.41	17,106	1,460,173	164,879	0.104	85.36	8.86	1.161	0.99980

THE EMPIRE DISTRICT ELECTRIC COMPANY
CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI
 10/1/2016 to 10/31/2016
 EXCLUDING MAJOR EVENT DAYS

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1050	3	3.39	123	8,188	1,597	0.077	66.57	5.13	1.000	0.99989
1051	4	8.09	30	3,336	1,067	0.028	111.20	3.13	1.034	0.99993
1052	2	1.69	148	7,029	1,162	0.127	47.49	6.05	1.000	0.99986
1081	2	2.78	24	2,051	18	1.333	85.46	113.94	1.333	0.99745
1082	7	12.67	1,422	195,918	1,330	1.069	137.78	147.31	1.072	0.99670
1091	2	4.88	2	293	716	0.003	146.50	0.41	1.000	0.99999
1092	2	3.86	2	232	971	0.002	116.00	0.24	1.000	0.99999
1102	1	1.08	15	940	465	0.032	62.67	2.02	1.000	0.99995
1211	3	3.22	124	12,118	1,479	0.084	97.73	8.19	1.117	0.99982
1212	1	1.80	1	108	332	0.003	108.00	0.33	1.000	0.99999
1230	3	2.45	3	147	1,179	0.003	49.00	0.12	1.000	0.99999
1232	1	1.55	1	93	1,183	0.001	93.00	0.08	1.000	0.99999
1233	2	0.45	2	27	640	0.003	13.50	0.04	1.000	0.99999
1242	2	2.45	30	1,275	680	0.044	42.50	1.88	1.000	0.99996
1243	1	0.72	2	87	1,199	0.002	43.50	0.07	1.000	0.99999
1263	2	2.29	77	5,277	1,132	0.068	68.53	4.66	1.000	0.99990
1264	2	2.43	2	146	18	0.111	73.00	8.11	1.000	0.99982

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1265	4	3.61	54	1,731	1,282	0.042	32.06	1.35	1.000	0.99997
1271	2	1.84	20	1,165	962	0.021	58.25	1.21	1.053	0.99997
1272	1	0.80	3	144	14	0.214	48.00	10.29	1.000	0.99977
1273	2	2.07	10	652	865	0.012	65.20	0.75	1.000	0.99998
1282	1	0.77	1	46	1,035	0.001	46.00	0.04	1.000	0.99999
1284	6	6.12	63	3,040	948	0.066	48.25	3.21	1.000	0.99993
1285	3	10.23	43	11,012	1,094	0.039	256.09	10.07	1.000	0.99977
1311	1	1.15	5	345	272	0.018	69.00	1.27	1.000	0.99997
1312	2	2.19	265	20,959	934	0.284	79.09	22.44	1.011	0.99950
1453	8	9.95	173	16,789	1,797	0.096	97.05	9.34	1.030	0.99979
1454	1	0.60	1	36	935	0.001	36.00	0.04	1.000	0.99999
1455	1	0.87	1	52	389	0.003	52.00	0.13	1.000	0.99999
1521	2	3.37	9	1,135	361	0.025	126.11	3.14	1.125	0.99993
1523	3	2.85	14	764	723	0.019	54.57	1.06	1.167	0.99998
1841	3	3.16	33	2,237	649	0.051	67.79	3.45	1.000	0.99992
1842	1	0.93	281	15,871	280	1.004	56.48	56.68	1.004	0.99873
1843	4	4.80	4	288	1,085	0.004	72.00	0.27	1.000	0.99999
2211	3	4.75	27	2,427	723	0.037	89.89	3.36	1.000	0.99992
2212	5	8.83	1,321	94,625	1,296	1.019	71.63	73.01	1.442	0.99836
2491	1	2.68	1	161	63	0.016	161.00	2.56	1.000	0.99994
2511	1	0.60	618	22,721	618	1.000	36.77	36.77	1.000	0.99918
2921	1	0.88	11	591	375	0.029	53.73	1.58	1.000	0.99996

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
2961	2	2.53	30	1,369	648	0.046	45.63	2.11	1.000	0.99995
3121	1	2.22	1	133	1,131	0.001	133.00	0.12	1.000	0.99999
3123	1	1.15	10	696	702	0.014	69.60	0.99	1.000	0.99998
3222	3	6.20	12	962	770	0.016	80.17	1.25	1.091	0.99997
3303	3	3.21	116	7,172	979	0.118	61.83	7.33	1.009	0.99984
3311	1	1.92	6	634	534	0.011	105.67	1.19	1.000	0.99997
3314	1	4.23	1	254	222	0.005	254.00	1.14	1.000	0.99997
3422	2	4.23	34	3,049	971	0.035	89.68	3.14	1.000	0.99993
3423	1	0.73	1	44	386	0.003	44.00	0.11	1.000	0.99999
3472	2	1.70	124	4,565	1,579	0.079	36.81	2.89	1.000	0.99994
3551	2	1.18	130	4,654	1,038	0.125	35.80	4.48	1.000	0.99990
3552	1	0.60	1	36	575	0.002	36.00	0.06	1.000	0.99999
3553	3	2.94	242	17,094	1,041	0.232	70.64	16.42	1.004	0.99963
3591	4	5.82	61	3,938	1,206	0.051	64.56	3.27	1.017	0.99993
3592	4	5.77	291	36,139	1,741	0.167	124.19	20.76	1.062	0.99953
3593	3	9.67	57	8,146	929	0.061	142.91	8.77	1.000	0.99980
3621	1	0.63	2	77	1,558	0.001	38.50	0.05	1.000	0.99999
3661	5	5.59	2,085	81,337	1,027	2.030	39.01	79.20	2.028	0.99823
3662	3	2.39	16	714	778	0.021	44.63	0.92	1.067	0.99998
3664	2	2.11	44	2,864	514	0.086	65.09	5.57	1.023	0.99988
3671	1	0.97	503	29,576	503	1.000	58.80	58.80	1.000	0.99868
3672	1	0.85	137	6,987	137	1.000	51.00	51.00	1.000	0.99886

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3675	1	0.78	1	47	415	0.002	47.00	0.11	1.000	0.99999
3701	1	4.33	22	5,729	484	0.045	260.41	11.84	1.000	0.99973
3702	3	1.97	21	525	611	0.034	25.00	0.86	1.000	0.99998
3751	1	1.18	48	3,437	881	0.054	71.60	3.90	1.000	0.99991
3872	1	0.50	13	401	1,067	0.012	30.85	0.38	1.000	0.99999
3878	1	0.63	1	38	1,139	0.001	38.00	0.03	1.000	0.99999
3891	5	4.25	795	53,819	454	1.751	67.70	118.54	7.162	0.99734
3893	6	9.94	6	596	1,111	0.005	99.33	0.54	1.000	0.99999
3894	1	3.62	1	217	116	0.009	217.00	1.87	1.000	0.99996
3901	1	0.67	56	2,286	877	0.064	40.82	2.61	1.000	0.99994
3912	1	1.62	38	3,656	1,160	0.033	96.21	3.15	1.000	0.99993
3914	1	0.57	1	34	373	0.003	34.00	0.09	1.000	0.99999
3951	2	1.70	41	1,977	928	0.044	48.22	2.13	1.000	0.99995
3952	8	9.10	38	2,639	1,273	0.030	69.45	2.07	1.000	0.99995
3953	9	9.58	14	917	522	0.027	65.50	1.76	1.077	0.99996
3981	5	9.20	1,533	361,046	1,503	1.020	235.52	240.22	1.020	0.99462
3991	3	2.58	36	2,745	726	0.050	76.25	3.78	1.059	0.99992
4031	3	5.63	70	8,746	704	0.099	124.94	12.42	1.061	0.99972
404	1	0.55	22	736	169	0.130	33.45	4.36	1.000	0.99990
4091	2	3.18	25	2,666	1,148	0.022	106.64	2.32	1.000	0.99995
4092	1	1.55	7	654	434	0.016	93.43	1.51	1.000	0.99997
4102	2	1.71	91	6,091	903	0.101	66.93	6.75	1.000	0.99985

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4133	1	0.67	9	364	640	0.014	40.44	0.57	1.000	0.99999
4137	2	2.06	23	985	794	0.029	42.83	1.24	1.045	0.99997
4151	1	1.78	31	3,322	1,246	0.025	107.16	2.67	1.000	0.99994
4152	1	0.47	37	1,054	822	0.045	28.49	1.28	1.000	0.99997
4153	1	1.88	1	113	1,284	0.001	113.00	0.09	1.000	0.99999
4154	1	1.33	1	80	1,209	0.001	80.00	0.07	1.000	0.99999
4172	5	6.98	116	6,801	1,724	0.067	58.63	3.94	1.018	0.99991
4181	2	2.75	16	1,565	492	0.033	97.81	3.18	1.067	0.99993
4182	1	0.32	48	926	1,023	0.047	19.29	0.91	1.000	0.99998
4211	1	1.23	89	6,624	707	0.126	74.43	9.37	1.000	0.99979
4223	1	0.82	1	49	826	0.001	49.00	0.06	1.000	0.99999
4224	2	2.10	28	1,885	753	0.037	67.32	2.50	1.077	0.99994
4302	1	0.43	1	26	651	0.002	26.00	0.04	1.000	0.99999
4303	1	1.87	1	112	982	0.001	112.00	0.11	1.000	0.99999
4312	2	0.85	82	2,172	844	0.097	26.49	2.57	1.012	0.99994
4313	2	2.37	6	496	320	0.019	82.67	1.55	1.000	0.99997
4324	1	2.07	1	124	1,253	0.001	124.00	0.10	1.000	0.99999
4333	1	1.28	1	77	683	0.001	77.00	0.11	1.000	0.99999
4341	3	3.14	15	970	1,783	0.008	64.67	0.54	1.000	0.99999
4343	1	0.70	98	4,135	1,025	0.096	42.19	4.03	1.000	0.99991
4361	1	1.48	1,707	152,150	2,259	0.755	89.13	67.35	1.000	0.99572
4362	1	2.62	71	11,214	828	0.086	157.94	13.54	1.000	0.99970

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4363	6	10.27	2,183	90,037	1,662	1.313	41.24	54.17	1.313	0.99879
4371	3	2.15	24	1,582	1,543	0.016	65.92	1.03	1.000	0.99998
4372	2	3.14	6	459	440	0.014	76.50	1.04	1.000	0.99998
4373	1	1.35	1	81	776	0.001	81.00	0.10	1.000	0.99999
4381	1	0.77	1	46	333	0.003	46.00	0.14	1.000	0.99999
4386	1	3.50	153	32,017	1,653	0.093	209.26	19.37	1.000	0.99957
4431	5	7.65	49	5,189	1,386	0.035	105.90	3.74	1.043	0.99992
4432	2	4.10	30	3,788	462	0.065	126.27	8.20	1.034	0.99982
4511	3	4.40	28	1,686	1,132	0.025	60.21	1.49	1.037	0.99997
4512	1	0.65	1	39	1,014	0.001	39.00	0.04	1.000	0.99999
457	1	2.40	1	144	179	0.006	144.00	0.80	1.000	0.99998
4601	1	0.70	1	42	415	0.002	42.00	0.10	1.000	0.99999
4602	4	5.38	32	2,600	948	0.034	81.25	2.74	1.032	0.99994
4692	2	2.50	2	150	470	0.004	75.00	0.32	1.000	0.99999
4693	5	3.61	157	9,228	153	1.026	58.78	60.31	1.026	0.99865
5601	3	1.67	56	2,447	1,164	0.048	43.70	2.10	1.000	0.99995
5603	1	1.42	13	1,048	1,288	0.010	80.62	0.81	1.000	0.99998
5901	1	1.02	54	3,330	676	0.080	61.67	4.93	1.000	0.99989
5902	2	3.70	13	614	1,012	0.013	47.23	0.61	1.000	0.99999
5904	2	1.25	82	3,150	1,223	0.067	38.41	2.58	2.000	0.99994
5905	1	0.98	20	1,143	1,875	0.011	57.15	0.61	1.000	0.99999
6021	7	6.27	66	2,611	1,275	0.052	39.56	2.05	1.065	0.99995

HIGHLY CONFIDENTIAL

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUSTOMERS SERVED	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
Total:	290	378.41	17,106	1,460,173	164,879	0.104	85.36	8.86	1.161	0.99980

THE EMPIRE DISTRICT ELECTRIC COMPANY
CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI
 11/1/2016 to 11/30/2016
 INCLUDING MAJOR EVENT DAYS

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1050	1	0.72	1	43	1,597	0.001	43.00	0.03	1.000	0.99999
1051	1	0.92	53	2,937	1,067	0.050	55.42	2.75	1.000	0.99994
1081	4	3.80	80	4,572	56	1.428	57.15	81.64	1.428	0.99412
1082	5	5.87	36	3,394	1,330	0.027	94.28	2.55	1.000	0.99994
1092	1	1.62	1	97	971	0.001	97.00	0.10	1.000	0.99999
1093	2	2.53	42	2,926	239	0.176	69.67	12.24	1.000	0.99972
1094	4	2.93	76	3,460	1,237	0.061	45.53	2.80	1.027	0.99994
1211	1	2.02	1	121	1,479	0.001	121.00	0.08	1.000	0.99999
1212	1	1.15	1	69	332	0.003	69.00	0.21	1.000	0.99999
1213	3	2.50	6	394	554	0.011	65.67	0.71	1.000	0.99998
1230	4	3.67	72	2,929	1,179	0.061	40.68	2.48	1.000	0.99994
1241	2	2.30	2	138	853	0.002	69.00	0.16	1.000	0.99999
1242	5	72.81	681	71,067	680	1.001	104.36	104.51	1.093	0.99758
1243	1	0.95	50	2,850	1,199	0.042	57.00	2.38	1.000	0.99994
1263	3	2.73	80	3,538	1,132	0.071	44.23	3.13	1.000	0.99993
1271	2	1.63	5	307	962	0.005	61.40	0.32	1.000	0.99999
1273	1	0.58	8	281	865	0.009	35.13	0.32	1.000	0.99999

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1282	1	2.32	6	838	1,035	0.006	139.67	0.81	1.000	0.99998
1284	2	2.25	87	4,889	948	0.092	56.20	5.16	1.000	0.99988
1452	2	3.92	474	33,962	449	1.056	71.65	75.64	1.056	0.99825
1453	1	0.97	7	412	1,797	0.004	58.86	0.23	1.000	0.99999
1454	1	1.65	165	16,299	935	0.176	98.78	17.43	1.000	0.99960
1521	3	4.08	3	245	361	0.008	81.67	0.68	1.000	0.99998
1523	1	1.18	1	71	723	0.001	71.00	0.10	1.000	0.99999
1841	1	1.27	1	76	649	0.002	76.00	0.12	1.000	0.99999
1843	1	0.97	21	1,222	1,085	0.019	58.19	1.13	1.000	0.99997
2501	1	0.25	10	150	84	0.119	15.00	1.79	1.000	0.99996
2511	6	4.75	7	304	618	0.011	43.43	0.49	1.000	0.99999
2621	2	1.07	4	130	1,166	0.003	32.50	0.11	1.000	0.99999
2921	1	2.22	8	1,071	375	0.021	133.88	2.86	1.000	0.99993
2951	3	8.10	50	11,656	1,395	0.036	233.12	8.36	1.000	0.99981
2961	1	0.77	25	1,172	648	0.039	46.88	1.81	1.000	0.99996
3121	1	3.42	1	205	1,131	0.001	205.00	0.18	1.000	0.99999
3122	2	4.25	850	131,751	849	1.001	155.00	155.18	1.001	0.99641
3221	3	3.91	108	6,084	1,241	0.087	56.33	4.90	1.009	0.99989
3303	1	0.60	82	3,008	979	0.084	36.68	3.07	1.000	0.99993
3315	2	2.34	44	3,482	1,578	0.028	79.14	2.21	1.000	0.99995
3422	4	7.41	21	2,054	971	0.022	97.81	2.12	1.000	0.99995
3551	1	1.23	37	2,720	1,038	0.036	73.51	2.62	1.000	0.99994

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3552	3	13.22	40	9,108	575	0.070	227.70	15.84	1.379	0.99963
3553	3	2.83	34	2,302	1,041	0.033	67.71	2.21	1.030	0.99995
3591	2	2.69	33	2,685	1,206	0.027	81.36	2.23	1.000	0.99995
3592	1	1.28	1	77	1,741	0.001	77.00	0.04	1.000	0.99999
3621	1	1.40	18	1,515	1,558	0.012	84.17	0.97	1.000	0.99998
3661	1	4.97	1	298	1,027	0.001	298.00	0.29	1.000	0.99999
3663	1	1.53	1	92	795	0.001	92.00	0.12	1.000	0.99999
3664	2	1.70	5	349	514	0.010	69.80	0.68	1.250	0.99998
3691	1	0.73	1	44	1,163	0.001	44.00	0.04	1.000	0.99999
3692	1	2.42	1	145	410	0.002	145.00	0.35	1.000	0.99999
3701	1	0.62	1	37	484	0.002	37.00	0.08	1.000	0.99999
3751	1	1.05	14	892	881	0.016	63.71	1.01	1.000	0.99998
3871	1	0.53	1	32	1,387	0.001	32.00	0.02	1.000	0.99999
3878	3	3.26	3	196	1,139	0.003	65.33	0.17	1.000	0.99999
3891	1	0.70	59	2,536	454	0.130	42.98	5.59	1.000	0.99987
3901	1	3.10	1	186	877	0.001	186.00	0.21	1.000	0.99999
3903	1	0.68	6	249	298	0.020	41.50	0.84	1.000	0.99998
3913	1	1.57	95	8,972	809	0.117	94.44	11.09	1.000	0.99974
3951	1	1.32	38	3,010	928	0.041	79.21	3.24	1.000	0.99992
3952	2	2.47	40	2,959	1,273	0.031	73.98	2.32	1.000	0.99995
3953	3	3.60	28	1,824	522	0.054	65.14	3.49	1.037	0.99992
3981	1	0.93	13	739	1,503	0.009	56.85	0.49	1.000	0.99999

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3982	2	0.78	53	1,158	1,765	0.030	21.85	0.66	1.019	0.99998
3991	1	0.77	19	855	726	0.026	45.00	1.18	1.000	0.99997
402	1	1.25	1	75	107	0.009	75.00	0.70	1.000	0.99998
4031	3	4.94	15	1,574	704	0.021	104.93	2.24	1.000	0.99995
4091	1	1.52	1	91	1,148	0.001	91.00	0.08	1.000	0.99999
4092	2	2.00	22	1,268	434	0.051	57.64	2.92	1.000	0.99993
4101	1	1.20	17	1,234	588	0.029	72.59	2.10	1.000	0.99995
4102	4	7.35	88	9,993	903	0.097	113.56	11.07	1.467	0.99974
4138	2	1.08	33	1,098	745	0.044	33.27	1.47	1.000	0.99997
4142	1	0.87	6	314	597	0.010	52.33	0.53	1.000	0.99999
4151	1	0.73	1	44	1,246	0.001	44.00	0.04	1.000	0.99999
4171	1	0.48	1	29	676	0.001	29.00	0.04	1.000	0.99999
4172	7	8.48	76	5,873	1,724	0.044	77.28	3.41	1.056	0.99992
4182	2	0.96	2	58	1,023	0.002	29.00	0.06	1.000	0.99999
4224	1	1.10	18	1,189	753	0.024	66.06	1.58	1.000	0.99996
4311	1	0.47	13	367	791	0.016	28.23	0.46	1.000	0.99999
4313	2	3.05	2	183	320	0.006	91.50	0.57	1.000	0.99999
4331	1	0.43	1	26	305	0.003	26.00	0.09	1.000	0.99999
4341	3	3.60	131	4,110	1,783	0.073	31.37	2.31	2.015	0.99995
4342	16	24.81	141	12,760	1,752	0.080	90.50	7.28	1.022	0.99983
4361	1	0.42	1	25	797	0.001	25.00	0.03	1.000	0.99999
4362	1	1.22	1	73	828	0.001	73.00	0.09	1.000	0.99999

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CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4363	5	3.61	115	6,609	1,662	0.069	57.47	3.98	1.009	0.99991
4371	6	3.41	1,602	13,075	1,543	1.038	8.16	8.47	1.039	0.99980
4372	1	0.48	12	353	440	0.027	29.42	0.80	1.000	0.99998
4381	1	0.08	1	5	333	0.003	5.00	0.02	1.000	0.99999
4431	3	4.28	1,406	221,536	1,386	1.014	157.56	159.84	1.017	0.99630
4512	1	1.55	113	10,541	1,014	0.111	93.28	10.40	1.000	0.99976
4692	1	0.58	1	35	470	0.002	35.00	0.07	1.000	0.99999
4714	1	1.32	2	159	329	0.006	79.50	0.48	1.000	0.99999
5601	2	1.08	73	2,292	1,164	0.063	31.40	1.97	1.000	0.99995
5603	5	6.28	112	6,216	1,288	0.087	55.50	4.83	1.000	0.99989
5902	2	1.35	19	1,126	1,012	0.019	59.26	1.11	1.000	0.99997
6021	1	1.38	6	499	1,275	0.005	83.17	0.39	1.000	0.99999
6024	1	1.02	12	740	393	0.031	61.67	1.88	1.000	0.99996
6141	1	3.42	1	205	635	0.002	205.00	0.32	1.000	0.99999
	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUSTOMERS SERVED	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
Total:	201	317.61	7,759	664,959	164,879	0.047	85.70	4.03	1.031	0.99991

THE EMPIRE DISTRICT ELECTRIC COMPANY
CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI
 11/1/2016 to 11/30/2016
 EXCLUDING MAJOR EVENT DAYS

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1050	1	0.72	1	43	1,597	0.001	43.00	0.03	1.000	0.99999
1051	1	0.92	53	2,937	1,067	0.050	55.42	2.75	1.000	0.99994
1081	4	3.80	80	4,572	56	1.428	57.15	81.64	1.428	0.99412
1082	5	5.87	36	3,394	1,330	0.027	94.28	2.55	1.000	0.99994
1092	1	1.62	1	97	971	0.001	97.00	0.10	1.000	0.99999
1093	2	2.53	42	2,926	239	0.176	69.67	12.24	1.000	0.99972
1094	4	2.93	76	3,460	1,237	0.061	45.53	2.80	1.027	0.99994
1211	1	2.02	1	121	1,479	0.001	121.00	0.08	1.000	0.99999
1212	1	1.15	1	69	332	0.003	69.00	0.21	1.000	0.99999
1213	3	2.50	6	394	554	0.011	65.67	0.71	1.000	0.99998
1230	4	3.67	72	2,929	1,179	0.061	40.68	2.48	1.000	0.99994
1241	2	2.30	2	138	853	0.002	69.00	0.16	1.000	0.99999
1242	5	72.81	681	71,067	680	1.001	104.36	104.51	1.093	0.99758
1243	1	0.95	50	2,850	1,199	0.042	57.00	2.38	1.000	0.99994
1263	3	2.73	80	3,538	1,132	0.071	44.23	3.13	1.000	0.99993
1271	2	1.63	5	307	962	0.005	61.40	0.32	1.000	0.99999
1273	1	0.58	8	281	865	0.009	35.13	0.32	1.000	0.99999

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1282	1	2.32	6	838	1,035	0.006	139.67	0.81	1.000	0.99998
1284	2	2.25	87	4,889	948	0.092	56.20	5.16	1.000	0.99988
1452	2	3.92	474	33,962	449	1.056	71.65	75.64	1.056	0.99825
1453	1	0.97	7	412	1,797	0.004	58.86	0.23	1.000	0.99999
1454	1	1.65	165	16,299	935	0.176	98.78	17.43	1.000	0.99960
1521	3	4.08	3	245	361	0.008	81.67	0.68	1.000	0.99998
1523	1	1.18	1	71	723	0.001	71.00	0.10	1.000	0.99999
1841	1	1.27	1	76	649	0.002	76.00	0.12	1.000	0.99999
1843	1	0.97	21	1,222	1,085	0.019	58.19	1.13	1.000	0.99997
2501	1	0.25	10	150	84	0.119	15.00	1.79	1.000	0.99996
2511	6	4.75	7	304	618	0.011	43.43	0.49	1.000	0.99999
2621	2	1.07	4	130	1,166	0.003	32.50	0.11	1.000	0.99999
2921	1	2.22	8	1,071	375	0.021	133.88	2.86	1.000	0.99993
2951	3	8.10	50	11,656	1,395	0.036	233.12	8.36	1.000	0.99981
2961	1	0.77	25	1,172	648	0.039	46.88	1.81	1.000	0.99996
3121	1	3.42	1	205	1,131	0.001	205.00	0.18	1.000	0.99999
3122	2	4.25	850	131,751	849	1.001	155.00	155.18	1.001	0.99641
3221	3	3.91	108	6,084	1,241	0.087	56.33	4.90	1.009	0.99989
3303	1	0.60	82	3,008	979	0.084	36.68	3.07	1.000	0.99993
3315	2	2.34	44	3,482	1,578	0.028	79.14	2.21	1.000	0.99995
3422	4	7.41	21	2,054	971	0.022	97.81	2.12	1.000	0.99995
3551	1	1.23	37	2,720	1,038	0.036	73.51	2.62	1.000	0.99994

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3552	3	13.22	40	9,108	575	0.070	227.70	15.84	1.379	0.99963
3553	3	2.83	34	2,302	1,041	0.033	67.71	2.21	1.030	0.99995
3591	2	2.69	33	2,685	1,206	0.027	81.36	2.23	1.000	0.99995
3592	1	1.28	1	77	1,741	0.001	77.00	0.04	1.000	0.99999
3621	1	1.40	18	1,515	1,558	0.012	84.17	0.97	1.000	0.99998
3661	1	4.97	1	298	1,027	0.001	298.00	0.29	1.000	0.99999
3663	1	1.53	1	92	795	0.001	92.00	0.12	1.000	0.99999
3664	2	1.70	5	349	514	0.010	69.80	0.68	1.250	0.99998
3691	1	0.73	1	44	1,163	0.001	44.00	0.04	1.000	0.99999
3692	1	2.42	1	145	410	0.002	145.00	0.35	1.000	0.99999
3701	1	0.62	1	37	484	0.002	37.00	0.08	1.000	0.99999
3751	1	1.05	14	892	881	0.016	63.71	1.01	1.000	0.99998
3871	1	0.53	1	32	1,387	0.001	32.00	0.02	1.000	0.99999
3878	3	3.26	3	196	1,139	0.003	65.33	0.17	1.000	0.99999
3891	1	0.70	59	2,536	454	0.130	42.98	5.59	1.000	0.99987
3901	1	3.10	1	186	877	0.001	186.00	0.21	1.000	0.99999
3903	1	0.68	6	249	298	0.020	41.50	0.84	1.000	0.99998
3913	1	1.57	95	8,972	809	0.117	94.44	11.09	1.000	0.99974
3951	1	1.32	38	3,010	928	0.041	79.21	3.24	1.000	0.99992
3952	2	2.47	40	2,959	1,273	0.031	73.98	2.32	1.000	0.99995
3953	3	3.60	28	1,824	522	0.054	65.14	3.49	1.037	0.99992
3981	1	0.93	13	739	1,503	0.009	56.85	0.49	1.000	0.99999

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3982	2	0.78	53	1,158	1,765	0.030	21.85	0.66	1.019	0.99998
3991	1	0.77	19	855	726	0.026	45.00	1.18	1.000	0.99997
402	1	1.25	1	75	107	0.009	75.00	0.70	1.000	0.99998
4031	3	4.94	15	1,574	704	0.021	104.93	2.24	1.000	0.99995
4091	1	1.52	1	91	1,148	0.001	91.00	0.08	1.000	0.99999
4092	2	2.00	22	1,268	434	0.051	57.64	2.92	1.000	0.99993
4101	1	1.20	17	1,234	588	0.029	72.59	2.10	1.000	0.99995
4102	4	7.35	88	9,993	903	0.097	113.56	11.07	1.467	0.99974
4138	2	1.08	33	1,098	745	0.044	33.27	1.47	1.000	0.99997
4142	1	0.87	6	314	597	0.010	52.33	0.53	1.000	0.99999
4151	1	0.73	1	44	1,246	0.001	44.00	0.04	1.000	0.99999
4171	1	0.48	1	29	676	0.001	29.00	0.04	1.000	0.99999
4172	7	8.48	76	5,873	1,724	0.044	77.28	3.41	1.056	0.99992
4182	2	0.96	2	58	1,023	0.002	29.00	0.06	1.000	0.99999
4224	1	1.10	18	1,189	753	0.024	66.06	1.58	1.000	0.99996
4311	1	0.47	13	367	791	0.016	28.23	0.46	1.000	0.99999
4313	2	3.05	2	183	320	0.006	91.50	0.57	1.000	0.99999
4331	1	0.43	1	26	305	0.003	26.00	0.09	1.000	0.99999
4341	3	3.60	131	4,110	1,783	0.073	31.37	2.31	2.015	0.99995
4342	16	24.81	141	12,760	1,752	0.080	90.50	7.28	1.022	0.99983
4361	1	0.42	1	25	797	0.001	25.00	0.03	1.000	0.99999
4362	1	1.22	1	73	828	0.001	73.00	0.09	1.000	0.99999

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4363	5	3.61	115	6,609	1,662	0.069	57.47	3.98	1.009	0.99991
4371	6	3.41	1,602	13,075	1,543	1.038	8.16	8.47	1.039	0.99980
4372	1	0.48	12	353	440	0.027	29.42	0.80	1.000	0.99998
4381	1	0.08	1	5	333	0.003	5.00	0.02	1.000	0.99999
4431	3	4.28	1,406	221,536	1,386	1.014	157.56	159.84	1.017	0.99630
4512	1	1.55	113	10,541	1,014	0.111	93.28	10.40	1.000	0.99976
4692	1	0.58	1	35	470	0.002	35.00	0.07	1.000	0.99999
4714	1	1.32	2	159	329	0.006	79.50	0.48	1.000	0.99999
5601	2	1.08	73	2,292	1,164	0.063	31.40	1.97	1.000	0.99995
5603	5	6.28	112	6,216	1,288	0.087	55.50	4.83	1.000	0.99989
5902	2	1.35	19	1,126	1,012	0.019	59.26	1.11	1.000	0.99997
6021	1	1.38	6	499	1,275	0.005	83.17	0.39	1.000	0.99999
6024	1	1.02	12	740	393	0.031	61.67	1.88	1.000	0.99996
6141	1	3.42	1	205	635	0.002	205.00	0.32	1.000	0.99999
NUMBER OF OUTAGES		OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUSTOMERS SERVED	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
Total:	201	317.61	7,759	664,959	164,879	0.047	85.70	4.03	1.031	0.99991

THE EMPIRE DISTRICT ELECTRIC COMPANY
CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI
 12/1/2016 to 12/31/2016
 INCLUDING MAJOR EVENT DAYS

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1050	4	3.82	288	11,212	1,597	0.180	38.93	7.02	1.011	0.99984
1082	4	5.78	22	1,623	1,330	0.017	73.77	1.22	1.000	0.99997
1091	5	6.66	11	746	716	0.015	67.82	1.04	1.000	0.99998
1092	3	2.50	93	4,435	971	0.096	47.69	4.57	1.011	0.99990
1093	1	0.65	41	1,591	239	0.172	38.80	6.66	1.000	0.99985
1094	4	4.70	253	23,661	1,237	0.205	93.52	19.13	1.063	0.99957
1141	3	5.34	927	85,567	902	1.028	92.31	94.86	1.032	0.99787
1230	1	0.65	104	4,099	1,179	0.088	39.41	3.48	1.000	0.99992
1232	2	5.48	2	329	1,183	0.002	164.50	0.28	2.000	0.99999
1243	1	0.78	1	47	1,199	0.001	47.00	0.04	1.000	0.99999
1263	1	0.72	43	1,886	1,132	0.038	43.86	1.67	1.000	0.99996
1271	2	3.42	2	205	962	0.002	102.50	0.21	1.000	0.99999
1272	6	4.94	112	6,233	1,805	0.062	55.65	3.45	1.037	0.99003
1273	2	4.11	2	247	865	0.002	123.50	0.29	1.000	0.99999
1282	2	2.28	39	3,791	1,035	0.038	97.21	3.66	1.026	0.99992
1452	2	2.05	2	123	449	0.004	61.50	0.27	1.000	0.99999
1454	1	4.38	201	52,879	935	0.215	263.08	56.56	1.000	0.99873

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1521	1	5.27	1	316	361	0.003	316.00	0.88	1.000	0.99998
1841	2	2.65	2	159	649	0.003	79.50	0.24	1.000	0.99999
1843	1	0.45	7	191	1,085	0.006	27.29	0.18	1.000	0.99999
2091	3	7.06	183	36,568	879	0.208	199.83	41.60	1.011	0.99907
2092	3	5.32	23	1,928	917	0.025	83.83	2.10	1.000	0.99995
2171	4	4.72	4	283	564	0.007	70.75	0.50	1.000	0.99999
2212	3	3.95	3	237	1,296	0.002	79.00	0.18	1.000	0.99999
2921	1	1.92	1	115	375	0.003	115.00	0.31	1.000	0.99999
2951	1	0.67	15	603	1,395	0.011	40.20	0.43	1.000	0.99999
3122	1	1.10	15	1,001	849	0.018	66.73	1.18	1.000	0.99997
3221	4	2.74	4	164	1,241	0.003	41.00	0.13	1.333	0.99999
3303	1	0.72	57	2,485	979	0.058	43.60	2.54	1.000	0.99994
3311	2	1.35	43	2,134	534	0.081	49.63	4.00	1.024	0.99991
3315	1	0.67	23	926	1,578	0.015	40.26	0.59	1.000	0.99999
3551	1	1.23	27	2,022	1,038	0.026	74.89	1.95	1.000	0.99996
3591	3	3.23	50	3,135	1,206	0.041	62.70	2.60	1.020	0.99994
3592	5	24.29	20	2,721	1,741	0.011	136.05	1.56	1.000	0.99996
3621	4	4.44	24	1,209	1,558	0.015	50.38	0.78	1.000	0.99998
3661	1	4.53	30	8,188	1,027	0.029	272.93	7.97	1.000	0.99982
3662	1	0.93	31	1,736	778	0.040	56.00	2.23	1.000	0.99995
3664	1	0.85	82	4,195	514	0.160	51.16	8.16	1.000	0.99982
3701	1	1.07	2	129	484	0.004	64.50	0.27	1.000	0.99999

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3702	2	1.23	4	207	611	0.007	51.75	0.34	1.000	0.99999
3751	3	4.10	188	14,592	881	0.213	77.62	16.56	1.016	0.99963
3871	2	1.41	5	155	1,387	0.004	31.00	0.11	1.250	0.99999
3873	1	3.68	14	3,095	796	0.018	221.07	3.89	1.000	0.99991
3878	4	4.50	223	7,351	1,139	0.196	32.96	6.45	1.000	0.99986
3891	1	1.05	45	2,843	454	0.099	63.18	6.26	1.000	0.99986
3893	2	4.29	36	6,823	1,111	0.032	189.53	6.14	1.029	0.99986
3901	2	2.44	2	146	877	0.002	73.00	0.17	1.000	0.99999
3903	3	5.75	8	674	298	0.027	84.25	2.26	1.000	0.99995
3912	1	1.30	1	78	1,160	0.001	78.00	0.07	1.000	0.99999
3913	1	0.45	1	27	809	0.001	27.00	0.03	1.000	0.99999
3914	3	2.44	104	7,827	373	0.279	75.26	20.98	1.000	0.99953
3951	1	0.47	1	28	928	0.001	28.00	0.03	1.000	0.99999
3952	2	2.23	7	409	1,273	0.005	58.43	0.32	1.000	0.99999
3981	1	0.67	5	204	1,503	0.003	40.80	0.14	1.000	0.99999
3982	3	3.18	118	6,809	1,765	0.067	57.70	3.86	1.000	0.99991
3991	4	8.20	883	298,625	726	1.216	338.19	411.33	1.216	0.99079
404	1	0.40	1	24	169	0.006	24.00	0.14	1.000	0.99999
4091	4	6.08	53	3,318	1,148	0.046	62.60	2.89	1.039	0.99994
4102	2	2.41	32	1,042	903	0.035	32.56	1.15	1.000	0.99997
4131	2	1.20	3	102	201	0.015	34.00	0.51	1.000	0.99999
4134	1	1.22	1	73	835	0.001	73.00	0.09	1.000	0.99999

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4136	3	2.68	748	49,401	669	1.118	66.04	73.84	1.781	0.99835
4137	2	1.01	23	816	794	0.029	35.48	1.03	1.000	0.99998
4138	1	0.80	1	48	745	0.001	48.00	0.06	1.000	0.99999
4142	3	8.18	34	6,286	597	0.057	184.88	10.53	1.030	0.99976
4151	1	1.38	42	3,450	1,246	0.034	82.14	2.77	1.000	0.99994
4154	3	4.62	136	20,955	1,209	0.112	154.08	17.33	1.000	0.99961
4155	2	2.92	47	4,350	2,133	0.022	92.55	2.04	1.146	0.99995
4171	2	1.37	38	1,594	676	0.056	41.95	2.36	1.027	0.99995
4172	2	2.07	152	10,937	1,724	0.088	71.95	6.34	1.000	0.99986
4211	1	2.68	5	806	707	0.007	161.20	1.14	1.000	0.99997
4212	1	1.48	1	89	818	0.001	89.00	0.11	1.000	0.99999
4222	1	0.63	158	6,090	1,044	0.151	38.54	5.83	1.000	0.99987
4223	2	2.39	22	717	826	0.027	32.59	0.87	1.048	0.99998
4224	1	0.58	29	1,042	753	0.039	35.93	1.38	1.000	0.99997
4302	1	2.22	101	13,470	651	0.155	133.37	20.69	1.000	0.99954
4312	1	3.33	1	200	844	0.001	200.00	0.24	1.000	0.99999
4324	2	1.66	18	856	1,253	0.014	47.56	0.68	1.000	0.99998
4341	4	3.66	59	3,266	1,783	0.033	55.36	1.83	1.017	0.99996
4343	3	2.18	101	2,158	1,025	0.099	21.37	2.11	1.020	0.99995
4362	1	0.62	828	30,636	828	1.000	37.00	37.00	1.000	0.99917
4363	2	1.95	483	28,442	1,662	0.291	58.89	17.11	1.039	0.99962
4372	2	1.83	44	2,718	440	0.100	61.77	6.18	1.000	0.99986

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4385	1	1.80	1	108	1,122	0.001	108.00	0.10	1.000	0.99999
4431	3	3.79	272	26,506	1,386	0.196	97.45	19.12	1.007	0.99957
4432	2	2.77	8	655	462	0.017	81.88	1.42	1.000	0.99997
4601	10	18.12	15	1,904	415	0.036	126.93	4.59	1.000	0.99990
4602	4	1.23	15	315	948	0.016	21.00	0.33	1.000	0.99999
4692	6	9.67	46	2,678	470	0.098	58.22	5.70	1.070	0.99987
5601	3	9.49	465	45,061	1,164	0.399	96.91	38.71	1.043	0.99913
5603	3	1.27	73	1,899	1,288	0.057	26.01	1.47	1.014	0.99997
5901	1	1.22	32	2,337	676	0.047	73.03	3.46	1.000	0.99992
5904	1	0.75	37	1,673	1,223	0.030	45.22	1.37	1.000	0.99997
5905	1	1.50	89	8,057	1,875	0.047	90.53	4.30	1.000	0.99990
6021	1	0.73	32	1,420	1,275	0.025	44.38	1.11	1.000	0.99998
6022	1	0.83	6	303	490	0.012	50.50	0.62	1.000	0.99999
	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUSTOMERS SERVED	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
Total:	213	299.53	8,687	904,814	164,879	0.053	104.16	5.49	1.052	0.99988

THE EMPIRE DISTRICT ELECTRIC COMPANY
CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI
 12/1/2016 to 12/31/2016
 EXCLUDING MAJOR EVENT DAYS

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1050	4	3.82	288	11,212	1,597	0.180	38.93	7.02	1.011	0.99984
1082	4	5.78	22	1,623	1,330	0.017	73.77	1.22	1.000	0.99997
1091	5	6.66	11	746	716	0.015	67.82	1.04	1.000	0.99998
1092	3	2.50	93	4,435	971	0.096	47.69	4.57	1.011	0.99990
1093	1	0.65	41	1,591	239	0.172	38.80	6.66	1.000	0.99985
1094	4	4.70	253	23,661	1,237	0.205	93.52	19.13	1.063	0.99957
1141	3	5.34	927	85,567	902	1.028	92.31	94.86	1.032	0.99787
1230	1	0.65	104	4,099	1,179	0.088	39.41	3.48	1.000	0.99992
1232	2	5.48	2	329	1,183	0.002	164.50	0.28	2.000	0.99999
1243	1	0.78	1	47	1,199	0.001	47.00	0.04	1.000	0.99999
1263	1	0.72	43	1,886	1,132	0.038	43.86	1.67	1.000	0.99996
1271	2	3.42	2	205	962	0.002	102.50	0.21	1.000	0.99999
1272	6	4.94	112	6,233	1,805	0.062	55.65	3.45	1.037	0.99003
1273	2	4.11	2	247	865	0.002	123.50	0.29	1.000	0.99999
1282	2	2.28	39	3,791	1,035	0.038	97.21	3.66	1.026	0.99992
1452	2	2.05	2	123	449	0.004	61.50	0.27	1.000	0.99999
1454	1	4.38	201	52,879	935	0.215	263.08	56.56	1.000	0.99873

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1521	1	5.27	1	316	361	0.003	316.00	0.88	1.000	0.99998
1841	2	2.65	2	159	649	0.003	79.50	0.24	1.000	0.99999
1843	1	0.45	7	191	1,085	0.006	27.29	0.18	1.000	0.99999
2091	3	7.06	183	36,568	879	0.208	199.83	41.60	1.011	0.99907
2092	3	5.32	23	1,928	917	0.025	83.83	2.10	1.000	0.99995
2171	4	4.72	4	283	564	0.007	70.75	0.50	1.000	0.99999
2212	3	3.95	3	237	1,296	0.002	79.00	0.18	1.000	0.99999
2921	1	1.92	1	115	375	0.003	115.00	0.31	1.000	0.99999
2951	1	0.67	15	603	1,395	0.011	40.20	0.43	1.000	0.99999
3122	1	1.10	15	1,001	849	0.018	66.73	1.18	1.000	0.99997
3221	4	2.74	4	164	1,241	0.003	41.00	0.13	1.333	0.99999
3303	1	0.72	57	2,485	979	0.058	43.60	2.54	1.000	0.99994
3311	2	1.35	43	2,134	534	0.081	49.63	4.00	1.024	0.99991
3315	1	0.67	23	926	1,578	0.015	40.26	0.59	1.000	0.99999
3551	1	1.23	27	2,022	1,038	0.026	74.89	1.95	1.000	0.99996
3591	3	3.23	50	3,135	1,206	0.041	62.70	2.60	1.020	0.99994
3592	5	24.29	20	2,721	1,741	0.011	136.05	1.56	1.000	0.99996
3621	4	4.44	24	1,209	1,558	0.015	50.38	0.78	1.000	0.99998
3661	1	4.53	30	8,188	1,027	0.029	272.93	7.97	1.000	0.99982
3662	1	0.93	31	1,736	778	0.040	56.00	2.23	1.000	0.99995
3664	1	0.85	82	4,195	514	0.160	51.16	8.16	1.000	0.99982
3701	1	1.07	2	129	484	0.004	64.50	0.27	1.000	0.99999

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3702	2	1.23	4	207	611	0.007	51.75	0.34	1.000	0.99999
3751	3	4.10	188	14,592	881	0.213	77.62	16.56	1.016	0.99963
3871	2	1.41	5	155	1,387	0.004	31.00	0.11	1.250	0.99999
3873	1	3.68	14	3,095	796	0.018	221.07	3.89	1.000	0.99991
3878	4	4.50	223	7,351	1,139	0.196	32.96	6.45	1.000	0.99986
3891	1	1.05	45	2,843	454	0.099	63.18	6.26	1.000	0.99986
3893	2	4.29	36	6,823	1,111	0.032	189.53	6.14	1.029	0.99986
3901	2	2.44	2	146	877	0.002	73.00	0.17	1.000	0.99999
3903	3	5.75	8	674	298	0.027	84.25	2.26	1.000	0.99995
3912	1	1.30	1	78	1,160	0.001	78.00	0.07	1.000	0.99999
3913	1	0.45	1	27	809	0.001	27.00	0.03	1.000	0.99999
3914	3	2.44	104	7,827	373	0.279	75.26	20.98	1.000	0.99953
3951	1	0.47	1	28	928	0.001	28.00	0.03	1.000	0.99999
3952	2	2.23	7	409	1,273	0.005	58.43	0.32	1.000	0.99999
3981	1	0.67	5	204	1,503	0.003	40.80	0.14	1.000	0.99999
3982	3	3.18	118	6,809	1,765	0.067	57.70	3.86	1.000	0.99991
3991	4	8.20	883	298,625	726	1.216	338.19	411.33	1.216	0.99079
404	1	0.40	1	24	169	0.006	24.00	0.14	1.000	0.99999
4091	4	6.08	53	3,318	1,148	0.046	62.60	2.89	1.039	0.99994
4102	2	2.41	32	1,042	903	0.035	32.56	1.15	1.000	0.99997
4131	2	1.20	3	102	201	0.015	34.00	0.51	1.000	0.99999
4134	1	1.22	1	73	835	0.001	73.00	0.09	1.000	0.99999

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4136	3	2.68	748	49,401	669	1.118	66.04	73.84	1.781	0.99835
4137	2	1.01	23	816	794	0.029	35.48	1.03	1.000	0.99998
4138	1	0.80	1	48	745	0.001	48.00	0.06	1.000	0.99999
4142	3	8.18	34	6,286	597	0.057	184.88	10.53	1.030	0.99976
4151	1	1.38	42	3,450	1,246	0.034	82.14	2.77	1.000	0.99994
4154	3	4.62	136	20,955	1,209	0.112	154.08	17.33	1.000	0.99961
4155	2	2.92	47	4,350	2,133	0.022	92.55	2.04	1.146	0.99995
4171	2	1.37	38	1,594	676	0.056	41.95	2.36	1.027	0.99995
4172	2	2.07	152	10,937	1,724	0.088	71.95	6.34	1.000	0.99986
4211	1	2.68	5	806	707	0.007	161.20	1.14	1.000	0.99997
4212	1	1.48	1	89	818	0.001	89.00	0.11	1.000	0.99999
4222	1	0.63	158	6,090	1,044	0.151	38.54	5.83	1.000	0.99987
4223	2	2.39	22	717	826	0.027	32.59	0.87	1.048	0.99998
4224	1	0.58	29	1,042	753	0.039	35.93	1.38	1.000	0.99997
4302	1	2.22	101	13,470	651	0.155	133.37	20.69	1.000	0.99954
4312	1	3.33	1	200	844	0.001	200.00	0.24	1.000	0.99999
4324	2	1.66	18	856	1,253	0.014	47.56	0.68	1.000	0.99998
4341	4	3.66	59	3,266	1,783	0.033	55.36	1.83	1.017	0.99996
4343	3	2.18	101	2,158	1,025	0.099	21.37	2.11	1.020	0.99995
4362	1	0.62	828	30,636	828	1.000	37.00	37.00	1.000	0.99917
4363	2	1.95	483	28,442	1,662	0.291	58.89	17.11	1.039	0.99962
4372	2	1.83	44	2,718	440	0.100	61.77	6.18	1.000	0.99986

HIGHLY CONFIDENTIAL

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4385	1	1.80	1	108	1,122	0.001	108.00	0.10	1.000	0.99999
4431	3	3.79	272	26,506	1,386	0.196	97.45	19.12	1.007	0.99957
4432	2	2.77	8	655	462	0.017	81.88	1.42	1.000	0.99997
4601	10	18.12	15	1,904	415	0.036	126.93	4.59	1.000	0.99990
4602	4	1.23	15	315	948	0.016	21.00	0.33	1.000	0.99999
4692	6	9.67	46	2,678	470	0.098	58.22	5.70	1.070	0.99987
5601	3	9.49	465	45,061	1,164	0.399	96.91	38.71	1.043	0.99913
5603	3	1.27	73	1,899	1,288	0.057	26.01	1.47	1.014	0.99997
5901	1	1.22	32	2,337	676	0.047	73.03	3.46	1.000	0.99992
5904	1	0.75	37	1,673	1,223	0.030	45.22	1.37	1.000	0.99997
5905	1	1.50	89	8,057	1,875	0.047	90.53	4.30	1.000	0.99990
6021	1	0.73	32	1,420	1,275	0.025	44.38	1.11	1.000	0.99998
6022	1	0.83	6	303	490	0.012	50.50	0.62	1.000	0.99999
	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUSTOMERS SERVED	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
Total:	213	299.53	8,687	904,814	164,879	0.053	104.16	5.49	1.052	0.99988

THE EMPIRE DISTRICT ELECTRIC COMPANY
CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI
 2/1/2016 to 2/29/2016
 INCLUDING MAJOR EVENT DAYS

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1050	1	0.65	38	1,490	1,596	0.024	39.21	0.93	1.000	0.99998
1051	1	0.80	3	146	1,067	0.003	48.67	0.14	1.000	0.99999
1052	1	0.97	48	2,813	1,162	0.041	58.60	2.42	1.000	0.99994
1082	4	3.61	58	3,867	1,326	0.044	66.67	2.92	1.036	0.99993
1091	1	1.08	54	3,531	714	0.076	65.39	4.95	1.000	0.99988
1092	2	2.54	2	152	969	0.002	76.00	0.16	1.000	0.99999
1101	1	1.22	106	7,769	977	0.108	73.29	7.95	1.000	0.99981
1102	1	0.32	25	492	463	0.054	19.68	1.06	1.000	0.99997
1141	3	2.07	904	30,419	903	1.001	33.65	33.69	4.284	0.99919
1142	1	0.58	1	35	215	0.005	35.00	0.16	1.000	0.99999
1211	2	2.49	2	149	1,482	0.001	74.50	0.10	1.000	0.99999
1213	1	1.28	4	310	552	0.007	77.50	0.56	1.000	0.99999
1232	1	0.28	1	17	1,179	0.001	17.00	0.01	1.000	0.99999
1261	1	0.52	5	156	397	0.013	31.20	0.39	1.000	0.99999
1271	1	1.32	1	79	959	0.001	79.00	0.08	1.000	0.99999
1282	2	3.07	2	184	1,035	0.002	92.00	0.18	1.000	0.99999
1284	3	2.79	69	3,841	912	0.076	55.67	4.21	1.000	0.99990

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1311	1	0.65	1	39	274	0.004	39.00	0.14	1.000	0.99999
1453	1	1.05	1	63	1,786	0.001	63.00	0.04	1.000	0.99999
1455	1	0.25	1	15	387	0.003	15.00	0.04	1.000	0.99999
1521	1	1.15	5	347	359	0.014	69.40	0.97	1.000	0.99998
1843	3	1.71	3	103	1,086	0.003	34.33	0.09	1.000	0.99999
2171	1	0.63	110	4,185	819	0.134	38.05	5.11	1.000	0.99988
2172	6	5.10	100	8,894	225	0.444	88.94	39.53	1.053	0.99905
2212	1	1.82	1	109	1,291	0.001	109.00	0.08	1.000	0.99999
2921	2	1.53	750	34,705	375	2.000	46.27	92.55	2.000	0.99778
2951	1	0.45	1	27	1,382	0.001	27.00	0.02	1.000	0.99999
2961	1	0.75	642	29,178	648	0.991	45.45	45.03	1.000	0.99892
2962	1	0.72	257	11,051	257	1.000	43.00	43.00	1.000	0.99897
3123	2	1.21	2	73	700	0.003	36.50	0.10	1.000	0.99999
3221	1	0.53	1	32	1,239	0.001	32.00	0.03	1.000	0.99999
3222	1	2.50	1	150	771	0.001	150.00	0.19	1.000	0.99999
3232	1	0.87	1	52	431	0.002	52.00	0.12	1.000	0.99999
3313	1	0.75	31	1,396	1,317	0.024	45.03	1.06	1.000	0.99997
3471	2	3.69	2	221	170	0.012	110.50	1.30	2.000	0.99997
3553	3	3.33	80	7,996	1,035	0.077	99.95	7.73	1.000	0.99981
3592	1	1.80	1	108	1,741	0.001	108.00	0.06	1.000	0.99999
3621	1	2.42	1	145	1,561	0.001	145.00	0.09	1.000	0.99999
3662	1	1.17	3	211	774	0.004	70.33	0.27	1.000	0.99999

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3663	1	0.45	9	246	793	0.011	27.33	0.31	1.000	0.99999
3672	1	0.50	9	274	137	0.066	30.44	2.00	1.000	0.99995
3701	3	3.13	486	28,837	485	1.002	59.34	59.46	1.019	0.99858
3751	1	1.55	884	82,698	884	1.000	93.55	93.55	1.000	0.99776
3893	2	1.82	10	556	1,108	0.009	55.60	0.50	1.000	0.99999
3912	1	0.80	1	48	1,132	0.001	48.00	0.04	1.000	0.99999
3971	1	0.77	1	46	665	0.002	46.00	0.07	1.000	0.99999
3981	2	2.27	1,505	68,723	1,504	1.001	45.66	45.69	1.001	0.99891
3982	1	0.75	1,768	80,326	1,768	1.000	45.43	45.43	1.000	0.99891
3991	1	0.80	1	48	726	0.001	48.00	0.07	1.000	0.99999
4031	1	1.13	7	480	695	0.010	68.57	0.69	1.000	0.99998
4102	1	0.87	25	1,301	902	0.028	52.04	1.44	1.000	0.99997
4132	1	1.13	1	68	566	0.002	68.00	0.12	1.000	0.99999
4141	1	2.15	1	129	82	0.012	129.00	1.57	1.000	0.99996
4152	1	1.93	1	116	816	0.001	116.00	0.14	1.000	0.99999
4173	1	2.18	70	9,141	632	0.111	130.59	14.46	1.000	0.99965
4181	3	4.23	494	22,144	492	1.004	44.83	45.01	1.211	0.99892
4212	2	5.07	3	493	817	0.004	164.33	0.60	1.000	0.99999
4223	1	17.25	3	3,106	818	0.004	1035.33	3.80	1.000	0.99991
4302	1	2.33	1	140	650	0.002	140.00	0.22	1.000	0.99999
4303	2	6.56	3	534	970	0.003	178.00	0.55	1.000	0.99999
4313	1	0.60	6	219	319	0.019	36.50	0.69	1.000	0.99998

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4324	3	3.74	18	1,777	1,251	0.014	98.72	1.42	1.059	0.99997
4341	1	2.05	1	123	1,780	0.001	123.00	0.07	1.000	0.99999
4343	8	11.18	77	7,861	1,024	0.075	102.09	7.68	1.000	0.99982
4373	2	3.50	15	844	775	0.019	56.27	1.09	1.071	0.99997
4381	1	1.20	1	72	334	0.003	72.00	0.22	1.000	0.99999
4432	1	0.77	1	46	461	0.002	46.00	0.10	1.000	0.99999
4511	1	1.63	2	196	1,130	0.002	98.00	0.17	1.000	0.99999
4512	1	1.10	1	66	1,010	0.001	66.00	0.07	1.000	0.99999
4602	1	1.17	1	70	948	0.001	70.00	0.07	1.000	0.99999
5601	2	3.00	41	5,820	1,160	0.035	141.95	5.02	1.000	0.99988
5902	1	0.70	6	252	1,010	0.006	42.00	0.25	1.000	0.99999
5904	1	0.80	34	1,658	1,223	0.028	48.76	1.36	1.000	0.99997
6021	1	0.62	2	74	1,264	0.002	37.00	0.06	1.000	0.99999
6023	5	1.40	11	187	129	0.085	17.00	1.45	1.000	0.99997
	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUSTOMERS SERVED	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
Total:	120	150.80	8,818	473,269	164,726	0.054	53.67	2.87	1.149	0.99993

THE EMPIRE DISTRICT ELECTRIC COMPANY
CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI
 2/1/2016 to 2/29/2016
 EXCLUDING MAJOR EVENT DAYS

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1050	1	0.65	38	1,490	1,596	0.024	39.21	0.93	1.000	0.99998
1051	1	0.80	3	146	1,067	0.003	48.67	0.14	1.000	0.99999
1052	1	0.97	48	2,813	1,162	0.041	58.60	2.42	1.000	0.99994
1082	4	3.61	58	3,867	1,326	0.044	66.67	2.92	1.036	0.99993
1091	1	1.08	54	3,531	714	0.076	65.39	4.95	1.000	0.99988
1092	2	2.54	2	152	969	0.002	76.00	0.16	1.000	0.99999
1101	1	1.22	106	7,769	977	0.108	73.29	7.95	1.000	0.99981
1102	1	0.32	25	492	463	0.054	19.68	1.06	1.000	0.99997
1141	3	2.07	904	30,419	903	1.001	33.65	33.69	4.284	0.99919
1142	1	0.58	1	35	215	0.005	35.00	0.16	1.000	0.99999
1211	2	2.49	2	149	1,482	0.001	74.50	0.10	1.000	0.99999
1213	1	1.28	4	310	552	0.007	77.50	0.56	1.000	0.99999
1232	1	0.28	1	17	1,179	0.001	17.00	0.01	1.000	0.99999
1261	1	0.52	5	156	397	0.013	31.20	0.39	1.000	0.99999
1271	1	1.32	1	79	959	0.001	79.00	0.08	1.000	0.99999
1282	2	3.07	2	184	1,035	0.002	92.00	0.18	1.000	0.99999
1284	3	2.79	69	3,841	912	0.076	55.67	4.21	1.000	0.99990

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1311	1	0.65	1	39	274	0.004	39.00	0.14	1.000	0.99999
1453	1	1.05	1	63	1,786	0.001	63.00	0.04	1.000	0.99999
1455	1	0.25	1	15	387	0.003	15.00	0.04	1.000	0.99999
1521	1	1.15	5	347	359	0.014	69.40	0.97	1.000	0.99998
1843	3	1.71	3	103	1,086	0.003	34.33	0.09	1.000	0.99999
2171	1	0.63	110	4,185	819	0.134	38.05	5.11	1.000	0.99988
2172	6	5.10	100	8,894	225	0.444	88.94	39.53	1.053	0.99905
2212	1	1.82	1	109	1,291	0.001	109.00	0.08	1.000	0.99999
2921	2	1.53	750	34,705	375	2.000	46.27	92.55	2.000	0.99778
2951	1	0.45	1	27	1,382	0.001	27.00	0.02	1.000	0.99999
2961	1	0.75	642	29,178	648	0.991	45.45	45.03	1.000	0.99892
2962	1	0.72	257	11,051	257	1.000	43.00	43.00	1.000	0.99897
3123	2	1.21	2	73	700	0.003	36.50	0.10	1.000	0.99999
3221	1	0.53	1	32	1,239	0.001	32.00	0.03	1.000	0.99999
3222	1	2.50	1	150	771	0.001	150.00	0.19	1.000	0.99999
3232	1	0.87	1	52	431	0.002	52.00	0.12	1.000	0.99999
3313	1	0.75	31	1,396	1,317	0.024	45.03	1.06	1.000	0.99997
3471	2	3.69	2	221	170	0.012	110.50	1.30	2.000	0.99997
3553	3	3.33	80	7,996	1,035	0.077	99.95	7.73	1.000	0.99981
3592	1	1.80	1	108	1,741	0.001	108.00	0.06	1.000	0.99999
3621	1	2.42	1	145	1,561	0.001	145.00	0.09	1.000	0.99999
3662	1	1.17	3	211	774	0.004	70.33	0.27	1.000	0.99999

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3663	1	0.45	9	246	793	0.011	27.33	0.31	1.000	0.99999
3672	1	0.50	9	274	137	0.066	30.44	2.00	1.000	0.99995
3701	3	3.13	486	28,837	485	1.002	59.34	59.46	1.019	0.99858
3751	1	1.55	884	82,698	884	1.000	93.55	93.55	1.000	0.99776
3893	2	1.82	10	556	1,108	0.009	55.60	0.50	1.000	0.99999
3912	1	0.80	1	48	1,132	0.001	48.00	0.04	1.000	0.99999
3971	1	0.77	1	46	665	0.002	46.00	0.07	1.000	0.99999
3981	2	2.27	1,505	68,723	1,504	1.001	45.66	45.69	1.001	0.99891
3982	1	0.75	1,768	80,326	1,768	1.000	45.43	45.43	1.000	0.99891
3991	1	0.80	1	48	726	0.001	48.00	0.07	1.000	0.99999
4031	1	1.13	7	480	695	0.010	68.57	0.69	1.000	0.99998
4102	1	0.87	25	1,301	902	0.028	52.04	1.44	1.000	0.99997
4132	1	1.13	1	68	566	0.002	68.00	0.12	1.000	0.99999
4141	1	2.15	1	129	82	0.012	129.00	1.57	1.000	0.99996
4152	1	1.93	1	116	816	0.001	116.00	0.14	1.000	0.99999
4173	1	2.18	70	9,141	632	0.111	130.59	14.46	1.000	0.99965
4181	3	4.23	494	22,144	492	1.004	44.83	45.01	1.211	0.99892
4212	2	5.07	3	493	817	0.004	164.33	0.60	1.000	0.99999
4223	1	17.25	3	3,106	818	0.004	1035.33	3.80	1.000	0.99991
4302	1	2.33	1	140	650	0.002	140.00	0.22	1.000	0.99999
4303	2	6.56	3	534	970	0.003	178.00	0.55	1.000	0.99999
4313	1	0.60	6	219	319	0.019	36.50	0.69	1.000	0.99998

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4324	3	3.74	18	1,777	1,251	0.014	98.72	1.42	1.059	0.99997
4341	1	2.05	1	123	1,780	0.001	123.00	0.07	1.000	0.99999
4343	8	11.18	77	7,861	1,024	0.075	102.09	7.68	1.000	0.99982
4373	2	3.50	15	844	775	0.019	56.27	1.09	1.071	0.99997
4381	1	1.20	1	72	334	0.003	72.00	0.22	1.000	0.99999
4432	1	0.77	1	46	461	0.002	46.00	0.10	1.000	0.99999
4511	1	1.63	2	196	1,130	0.002	98.00	0.17	1.000	0.99999
4512	1	1.10	1	66	1,010	0.001	66.00	0.07	1.000	0.99999
4602	1	1.17	1	70	948	0.001	70.00	0.07	1.000	0.99999
5601	2	3.00	41	5,820	1,160	0.035	141.95	5.02	1.000	0.99988
5902	1	0.70	6	252	1,010	0.006	42.00	0.25	1.000	0.99999
5904	1	0.80	34	1,658	1,223	0.028	48.76	1.36	1.000	0.99997
6021	1	0.62	2	74	1,264	0.002	37.00	0.06	1.000	0.99999
6023	5	1.40	11	187	129	0.085	17.00	1.45	1.000	0.99997
NUMBER OF OUTAGES		OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUSTOMERS SERVED	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
Total:	120	150.80	8,818	473,269	164,726	0.054	53.67	2.87	1.149	0.99993

THE EMPIRE DISTRICT ELECTRIC COMPANY
CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI
 3/1/2016 to 3/31/2016
 INCLUDING MAJOR EVENT DAYS

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1050	2	1.50	38	571	1,596	0.024	15.03	0.36	1.000	0.99999
1051	1	0.43	45	1,199	1,067	0.042	26.64	1.12	1.000	0.99997
1092	2	1.59	2	95	970	0.002	47.50	0.10	1.000	0.99999
1093	2	4.82	2	289	239	0.008	144.50	1.21	1.000	0.99997
1101	1	23.58	1	1,415	978	0.001	1415.00	1.45	1.000	0.99997
1211	4	4.43	26	2,342	1,482	0.018	90.08	1.58	1.130	0.99996
1212	1	1.88	44	4,996	332	0.133	113.55	15.05	1.000	0.99966
1230	2	2.35	102	1,341	1,180	0.086	13.15	1.14	1.010	0.99997
1232	2	2.90	79	7,200	1,179	0.067	91.14	6.11	1.013	0.99986
1264	1	1.60	1	96	18	0.056	96.00	5.33	1.000	0.99988
1311	1	2.35	272	38,429	273	0.996	141.28	140.77	1.000	0.99685
1312	1	0.93	1	56	934	0.001	56.00	0.06	1.000	0.99999
1452	1	1.48	1	89	449	0.002	89.00	0.20	1.000	0.99999
1453	1	1.00	1	60	1,786	0.001	60.00	0.03	1.000	0.99999
1455	1	1.20	1	72	388	0.003	72.00	0.19	1.000	0.99999
1521	1	1.42	20	1,711	359	0.056	85.55	4.77	1.000	0.99989
1843	2	3.91	13	954	1,086	0.012	73.38	0.88	1.000	0.99998

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
2091	1	2.15	1	129	879	0.001	129.00	0.15	1.000	0.99999
2211	1	0.40	1	24	722	0.001	24.00	0.03	1.000	0.99999
2212	3	2.94	759	35,230	1,292	0.587	46.42	27.27	1.012	0.99939
2621	1	2.32	1	139	1,168	0.001	139.00	0.12	1.000	0.99999
2961	2	0.57	10	138	648	0.015	13.80	0.21	1.111	0.99999
2962	1	5.40	1	324	257	0.004	324.00	1.26	1.000	0.99997
3041	1	1.95	34	3,981	80	0.425	117.09	49.76	1.000	0.99889
3081	1	0.62	1	37	573	0.002	37.00	0.06	1.000	0.99999
3082	1	0.92	1	55	322	0.003	55.00	0.17	1.000	0.99999
3123	3	2.80	14	586	700	0.020	41.86	0.84	1.077	0.99998
3181	1	1.12	1	67	724	0.001	67.00	0.09	1.000	0.99999
3221	2	2.94	5	551	1,239	0.004	110.20	0.44	1.250	0.99999
3303	1	1.45	1	87	979	0.001	87.00	0.09	1.000	0.99999
3312	1	1.03	398	24,994	398	1.000	62.80	62.80	1.000	0.99859
3313	1	1.52	1,318	121,212	1,318	1.000	91.97	91.97	1.000	0.99794
3315	1	0.75	1	45	1,576	0.001	45.00	0.03	1.000	0.99999
3471	4	8.50	9	1,285	170	0.053	142.78	7.56	1.125	0.99983
3472	1	0.72	89	3,908	1,580	0.056	43.91	2.47	1.000	0.99994
3551	1	1.65	24	2,395	1,037	0.023	99.79	2.31	1.000	0.99995
3552	1	3.35	1	201	568	0.002	201.00	0.35	1.000	0.99999
3591	1	0.50	1	30	1,202	0.001	30.00	0.02	1.000	0.99999
3593	1	1.77	60	6,397	929	0.065	106.62	6.89	1.000	0.99985

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3621	2	1.80	2	108	1,560	0.001	54.00	0.07	1.000	0.99999
3662	1	2.20	1	132	776	0.001	132.00	0.17	1.000	0.99999
3663	2	1.38	8	347	794	0.010	43.38	0.44	1.143	0.99999
3664	1	0.93	1	56	517	0.002	56.00	0.11	1.000	0.99999
3675	1	0.38	12	276	415	0.029	23.00	0.67	1.000	0.99999
3694	1	2.00	47	5,676	1,326	0.035	120.77	4.28	1.000	0.99990
3701	2	1.90	16	907	485	0.033	56.69	1.87	1.067	0.99996
3702	2	1.79	610	35,959	609	1.002	58.95	59.05	1.002	0.99868
3751	1	0.15	29	261	884	0.033	9.00	0.30	1.000	0.99999
3872	1	1.93	24	2,798	1,067	0.022	116.58	2.62	1.000	0.99994
3878	5	3.20	42	1,302	1,133	0.037	31.00	1.15	1.000	0.99997
3892	1	1.17	489	34,585	500	0.978	70.73	69.17	1.000	0.99845
3901	1	0.72	56	2,408	880	0.064	43.00	2.74	1.000	0.99994
3903	1	0.98	6	358	298	0.020	59.67	1.20	1.000	0.99997
3912	1	0.25	1	15	1,136	0.001	15.00	0.01	1.000	0.99999
3913	2	2.66	150	10,276	810	0.185	68.51	12.69	1.007	0.99972
3952	2	1.32	23	1,050	1,263	0.018	45.65	0.83	1.045	0.99998
3981	1	1.10	6	396	1,504	0.004	66.00	0.26	1.000	0.99999
3991	1	0.62	1	37	726	0.001	37.00	0.05	1.000	0.99999
4031	1	2.42	1	145	696	0.001	145.00	0.21	1.000	0.99999
407	1	2.63	24	3,812	103	0.233	158.83	37.01	1.000	0.99917
4102	2	2.16	927	83,934	902	1.028	90.54	93.05	1.028	0.99792

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4134	1	1.47	9	796	833	0.011	88.44	0.96	1.000	0.99998
4152	2	4.08	36	3,467	816	0.044	96.31	4.25	1.000	0.99990
4153	2	2.47	1,311	90,469	1,310	1.001	69.01	69.06	1.001	0.99845
4154	3	4.87	3	292	1,205	0.002	97.33	0.24	1.000	0.99999
4155	1	1.48	3	269	2,099	0.001	89.67	0.13	1.000	0.99999
4171	1	0.73	1	44	677	0.001	44.00	0.06	1.000	0.99999
4172	1	1.23	1	74	1,724	0.001	74.00	0.04	1.000	0.99999
4182	2	1.21	1,044	10,497	1,020	1.024	10.05	10.29	1.026	0.99977
4212	3	5.36	9	882	816	0.011	98.00	1.08	1.286	0.99998
4223	1	1.60	1	96	820	0.001	96.00	0.12	1.000	0.99999
4301	1	1.00	22	1,340	102	0.216	60.91	13.14	1.000	0.99971
4324	2	1.07	2	64	1,252	0.002	32.00	0.05	1.000	0.99999
4341	2	4.23	85	7,178	1,780	0.048	84.45	4.03	1.000	0.99991
4342	1	1.28	1	77	1,748	0.001	77.00	0.04	1.000	0.99999
4343	1	0.18	1,024	11,349	1,024	1.000	11.08	11.08	1.000	0.99975
4362	1	0.77	33	1,507	828	0.040	45.67	1.82	1.000	0.99996
4363	2	2.55	37	2,323	1,658	0.022	62.78	1.40	1.028	0.99997
4371	1	0.83	1	50	1,543	0.001	50.00	0.03	1.000	0.99999
4373	1	1.03	27	1,676	775	0.035	62.07	2.16	1.000	0.99995
4432	2	2.01	27	1,896	461	0.059	70.22	4.11	1.000	0.99991
4714	1	1.02	1	61	328	0.003	61.00	0.19	1.000	0.99999
5601	1	0.87	1	52	1,162	0.001	52.00	0.04	1.000	0.99999

HIGHLY CONFIDENTIAL

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
5602	1	1.18	1	71	681	0.001	71.00	0.10	1.000	0.99999
5901	2	1.37	676	52,867	674	1.003	78.21	78.44	1.001	0.99824
5905	1	0.32	1	19	1,872	0.001	19.00	0.01	1.000	0.99999
6144	1	1.03	16	992	320	0.050	62.00	3.10	1.000	0.99993
	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUSTOMERS SERVED	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
Total:	128	181.67	10,229	635,976	164,788	0.062	62.17	3.86	1.008	0.99991

THE EMPIRE DISTRICT ELECTRIC COMPANY
CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI
 3/1/2016 to 3/31/2016
 EXCLUDING MAJOR EVENT DAYS

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1050	2	1.50	38	571	1,596	0.024	15.03	0.36	1.000	0.99999
1051	1	0.43	45	1,199	1,067	0.042	26.64	1.12	1.000	0.99997
1092	2	1.59	2	95	970	0.002	47.50	0.10	1.000	0.99999
1093	2	4.82	2	289	239	0.008	144.50	1.21	1.000	0.99997
1101	1	23.58	1	1,415	978	0.001	1415.00	1.45	1.000	0.99997
1211	4	4.43	26	2,342	1,482	0.018	90.08	1.58	1.130	0.99996
1212	1	1.88	44	4,996	332	0.133	113.55	15.05	1.000	0.99966
1230	2	2.35	102	1,341	1,180	0.086	13.15	1.14	1.010	0.99997
1232	2	2.90	79	7,200	1,179	0.067	91.14	6.11	1.013	0.99986
1264	1	1.60	1	96	18	0.056	96.00	5.33	1.000	0.99988
1311	1	2.35	272	38,429	273	0.996	141.28	140.77	1.000	0.99685
1312	1	0.93	1	56	934	0.001	56.00	0.06	1.000	0.99999
1452	1	1.48	1	89	449	0.002	89.00	0.20	1.000	0.99999
1453	1	1.00	1	60	1,786	0.001	60.00	0.03	1.000	0.99999
1455	1	1.20	1	72	388	0.003	72.00	0.19	1.000	0.99999
1521	1	1.42	20	1,711	359	0.056	85.55	4.77	1.000	0.99989
1843	2	3.91	13	954	1,086	0.012	73.38	0.88	1.000	0.99998

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
2091	1	2.15	1	129	879	0.001	129.00	0.15	1.000	0.99999
2211	1	0.40	1	24	722	0.001	24.00	0.03	1.000	0.99999
2212	3	2.94	759	35,230	1,292	0.587	46.42	27.27	1.012	0.99939
2621	1	2.32	1	139	1,168	0.001	139.00	0.12	1.000	0.99999
2961	2	0.57	10	138	648	0.015	13.80	0.21	1.111	0.99999
2962	1	5.40	1	324	257	0.004	324.00	1.26	1.000	0.99997
3041	1	1.95	34	3,981	80	0.425	117.09	49.76	1.000	0.99889
3081	1	0.62	1	37	573	0.002	37.00	0.06	1.000	0.99999
3082	1	0.92	1	55	322	0.003	55.00	0.17	1.000	0.99999
3123	3	2.80	14	586	700	0.020	41.86	0.84	1.077	0.99998
3181	1	1.12	1	67	724	0.001	67.00	0.09	1.000	0.99999
3221	2	2.94	5	551	1,239	0.004	110.20	0.44	1.250	0.99999
3303	1	1.45	1	87	979	0.001	87.00	0.09	1.000	0.99999
3312	1	1.03	398	24,994	398	1.000	62.80	62.80	1.000	0.99859
3313	1	1.52	1,318	121,212	1,318	1.000	91.97	91.97	1.000	0.99794
3315	1	0.75	1	45	1,576	0.001	45.00	0.03	1.000	0.99999
3471	4	8.50	9	1,285	170	0.053	142.78	7.56	1.125	0.99983
3472	1	0.72	89	3,908	1,580	0.056	43.91	2.47	1.000	0.99994
3551	1	1.65	24	2,395	1,037	0.023	99.79	2.31	1.000	0.99995
3552	1	3.35	1	201	568	0.002	201.00	0.35	1.000	0.99999
3591	1	0.50	1	30	1,202	0.001	30.00	0.02	1.000	0.99999
3593	1	1.77	60	6,397	929	0.065	106.62	6.89	1.000	0.99985

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3621	2	1.80	2	108	1,560	0.001	54.00	0.07	1.000	0.99999
3662	1	2.20	1	132	776	0.001	132.00	0.17	1.000	0.99999
3663	2	1.38	8	347	794	0.010	43.38	0.44	1.143	0.99999
3664	1	0.93	1	56	517	0.002	56.00	0.11	1.000	0.99999
3675	1	0.38	12	276	415	0.029	23.00	0.67	1.000	0.99999
3694	1	2.00	47	5,676	1,326	0.035	120.77	4.28	1.000	0.99990
3701	2	1.90	16	907	485	0.033	56.69	1.87	1.067	0.99996
3702	2	1.79	610	35,959	609	1.002	58.95	59.05	1.002	0.99868
3751	1	0.15	29	261	884	0.033	9.00	0.30	1.000	0.99999
3872	1	1.93	24	2,798	1,067	0.022	116.58	2.62	1.000	0.99994
3878	5	3.20	42	1,302	1,133	0.037	31.00	1.15	1.000	0.99997
3892	1	1.17	489	34,585	500	0.978	70.73	69.17	1.000	0.99845
3901	1	0.72	56	2,408	880	0.064	43.00	2.74	1.000	0.99994
3903	1	0.98	6	358	298	0.020	59.67	1.20	1.000	0.99997
3912	1	0.25	1	15	1,136	0.001	15.00	0.01	1.000	0.99999
3913	2	2.66	150	10,276	810	0.185	68.51	12.69	1.007	0.99972
3952	2	1.32	23	1,050	1,263	0.018	45.65	0.83	1.045	0.99998
3981	1	1.10	6	396	1,504	0.004	66.00	0.26	1.000	0.99999
3991	1	0.62	1	37	726	0.001	37.00	0.05	1.000	0.99999
4031	1	2.42	1	145	696	0.001	145.00	0.21	1.000	0.99999
407	1	2.63	24	3,812	103	0.233	158.83	37.01	1.000	0.99917
4102	2	2.16	927	83,934	902	1.028	90.54	93.05	1.028	0.99792

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4134	1	1.47	9	796	833	0.011	88.44	0.96	1.000	0.99998
4152	2	4.08	36	3,467	816	0.044	96.31	4.25	1.000	0.99990
4153	2	2.47	1,311	90,469	1,310	1.001	69.01	69.06	1.001	0.99845
4154	3	4.87	3	292	1,205	0.002	97.33	0.24	1.000	0.99999
4155	1	1.48	3	269	2,099	0.001	89.67	0.13	1.000	0.99999
4171	1	0.73	1	44	677	0.001	44.00	0.06	1.000	0.99999
4172	1	1.23	1	74	1,724	0.001	74.00	0.04	1.000	0.99999
4182	2	1.21	1,044	10,497	1,020	1.024	10.05	10.29	1.026	0.99977
4212	3	5.36	9	882	816	0.011	98.00	1.08	1.286	0.99998
4223	1	1.60	1	96	820	0.001	96.00	0.12	1.000	0.99999
4301	1	1.00	22	1,340	102	0.216	60.91	13.14	1.000	0.99971
4324	2	1.07	2	64	1,252	0.002	32.00	0.05	1.000	0.99999
4341	2	4.23	85	7,178	1,780	0.048	84.45	4.03	1.000	0.99991
4342	1	1.28	1	77	1,748	0.001	77.00	0.04	1.000	0.99999
4343	1	0.18	1,024	11,349	1,024	1.000	11.08	11.08	1.000	0.99975
4362	1	0.77	33	1,507	828	0.040	45.67	1.82	1.000	0.99996
4363	2	2.55	37	2,323	1,658	0.022	62.78	1.40	1.028	0.99997
4371	1	0.83	1	50	1,543	0.001	50.00	0.03	1.000	0.99999
4373	1	1.03	27	1,676	775	0.035	62.07	2.16	1.000	0.99995
4432	2	2.01	27	1,896	461	0.059	70.22	4.11	1.000	0.99991
4714	1	1.02	1	61	328	0.003	61.00	0.19	1.000	0.99999
5601	1	0.87	1	52	1,162	0.001	52.00	0.04	1.000	0.99999

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CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
5602	1	1.18	1	71	681	0.001	71.00	0.10	1.000	0.99999
5901	2	1.37	676	52,867	674	1.003	78.21	78.44	1.001	0.99824
5905	1	0.32	1	19	1,872	0.001	19.00	0.01	1.000	0.99999
6144	1	1.03	16	992	320	0.050	62.00	3.10	1.000	0.99993
	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUSTOMERS SERVED	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
Total:	128	181.67	10,229	635,976	164,788	0.062	62.17	3.86	1.008	0.99991

THE EMPIRE DISTRICT ELECTRIC COMPANY
CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI
 4/1/2016 to 4/30/2016
 INCLUDING MAJOR EVENT DAYS

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1050	5	9.22	300	40,649	1,596	0.188	135.50	25.47	1.282	0.99941
1051	2	9.85	16	1,074	1,067	0.015	67.13	1.01	1.000	0.99998
1052	2	1.40	123	5,962	1,162	0.106	48.47	5.13	1.000	0.99988
1082	4	8.19	16	1,403	1,327	0.012	87.69	1.06	1.143	0.99998
1091	2	9.91	54	25,156	714	0.076	465.85	35.23	1.000	0.99918
1092	2	2.24	21	965	970	0.022	45.95	0.99	1.050	0.99998
1094	3	9.28	3	557	1,234	0.002	185.67	0.45	1.000	0.99999
1141	2	5.43	2	326	903	0.002	163.00	0.36	1.000	0.99999
1142	3	6.72	94	7,774	215	0.437	82.70	36.16	1.011	0.99916
1211	1	0.93	1	56	1,483	0.001	56.00	0.04	1.000	0.99999
1212	1	1.27	1	76	333	0.003	76.00	0.23	1.000	0.99999
1213	4	4.20	12	962	554	0.022	80.17	1.74	1.000	0.99996
1230	2	2.72	104	8,435	1,180	0.088	81.11	7.15	1.010	0.99983
1232	4	11.27	171	30,383	1,179	0.145	177.68	25.77	1.082	0.99940
1243	2	2.90	51	6,555	1,198	0.043	128.53	5.47	1.000	0.99987
1262	1	0.82	1	49	156	0.006	49.00	0.31	1.000	0.99999
1265	2	0.53	21	379	1,282	0.016	18.05	0.30	1.000	0.99999

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1271	1	1.30	12	943	960	0.013	78.58	0.98	1.000	0.99998
1283	1	0.55	1	33	367	0.003	33.00	0.09	1.000	0.99999
1284	1	1.10	1	66	942	0.001	66.00	0.07	1.000	0.99999
1285	3	2.18	3	131	1,090	0.003	43.67	0.12	1.500	0.99999
1286	1	0.25	1	15	44	0.023	15.00	0.34	1.000	0.99999
1312	2	1.22	9	290	934	0.010	32.22	0.31	1.125	0.99999
1451	2	7.07	76	7,106	522	0.146	93.50	13.61	1.013	0.99968
1452	1	2.35	8	1,129	450	0.018	141.13	2.51	1.000	0.99994
1521	2	5.30	8	1,194	359	0.022	149.25	3.33	1.000	0.99992
1523	1	3.80	1	228	722	0.001	228.00	0.32	1.000	0.99999
1843	2	1.06	10	445	1,087	0.009	44.50	0.41	1.000	0.99999
2091	1	1.08	1	65	879	0.001	65.00	0.07	1.000	0.99999
2092	11	19.41	48	5,256	914	0.053	109.50	5.75	1.000	0.99987
2171	2	4.25	81	12,805	819	0.099	158.09	15.63	1.013	0.99964
2212	2	3.96	2	238	1,293	0.002	119.00	0.18	1.000	0.99999
2492	2	8.22	2	493	29	0.069	246.50	17.00	1.000	0.99961
2511	2	3.70	52	5,454	620	0.084	104.88	8.80	1.020	0.99980
2621	1	2.55	1	153	1,169	0.001	153.00	0.13	1.000	0.99999
2961	1	0.65	7	273	648	0.011	39.00	0.42	1.000	0.99999
2962	1	2.80	1	168	257	0.004	168.00	0.65	1.000	0.99998
3082	2	2.84	29	2,645	322	0.090	91.21	8.21	1.000	0.99981
3121	3	5.65	48	4,270	1,129	0.043	88.96	3.78	1.021	0.99991

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3122	2	2.46	2	148	847	0.002	74.00	0.17	1.000	0.99999
3221	2	1.36	8	333	1,239	0.006	41.63	0.27	1.000	0.99999
3222	2	1.92	16	729	770	0.021	45.56	0.95	1.067	0.99998
3231	1	1.10	1	66	413	0.002	66.00	0.16	1.000	0.99999
3302	15	23.51	78	7,632	899	0.087	97.85	8.49	1.054	0.99980
3311	1	0.62	1	37	534	0.002	37.00	0.07	1.000	0.99999
3315	1	0.63	6	229	1,576	0.004	38.17	0.15	1.000	0.99999
3422	1	0.92	1	55	971	0.001	55.00	0.06	1.000	0.99999
3423	1	1.28	1	77	386	0.003	77.00	0.20	1.000	0.99999
3472	4	8.49	12	914	1,579	0.008	76.17	0.58	1.091	0.99999
3551	3	10.83	67	4,717	1,038	0.065	70.40	4.54	1.000	0.99989
3552	1	1.30	15	1,178	568	0.026	78.53	2.07	1.000	0.99995
3553	4	10.49	255	43,691	1,039	0.245	171.34	42.05	1.008	0.99903
3592	6	9.08	21	1,345	1,742	0.012	64.05	0.77	1.105	0.99998
3593	1	2.70	1	162	929	0.001	162.00	0.17	1.000	0.99999
3594	1	0.65	11	435	679	0.016	39.55	0.64	1.000	0.99999
3621	2	4.98	47	8,520	1,560	0.030	181.28	5.46	1.022	0.99987
3663	1	4.28	70	18,058	794	0.088	257.97	22.74	1.000	0.99947
3673	1	1.15	10	696	266	0.038	69.60	2.62	1.000	0.99994
3694	2	2.50	6	523	1,327	0.005	87.17	0.39	1.000	0.99999
3702	2	5.73	16	2,755	609	0.026	172.19	4.52	1.000	0.99990
3751	5	22.97	15	4,771	885	0.017	318.07	5.39	1.250	0.99988

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3871	2	4.05	1,385	131,156	1,385	1.000	94.70	94.70	1.303	0.99781
3872	1	1.30	26	2,043	1,067	0.024	78.58	1.91	1.000	0.99996
3873	3	2.37	16	1,110	793	0.020	69.38	1.40	1.000	0.99997
3878	1	0.67	16	654	1,133	0.014	40.88	0.58	1.000	0.99999
3891	5	10.31	5	619	452	0.011	123.80	1.37	1.000	0.99997
3893	5	11.48	81	5,137	1,109	0.073	63.42	4.63	1.038	0.99989
3901	2	4.98	7	926	878	0.008	132.29	1.05	1.000	0.99998
3903	2	2.75	12	781	298	0.040	65.08	2.62	1.000	0.99994
3913	2	15.65	24	11,549	810	0.030	481.21	14.26	1.000	0.99967
3951	2	7.56	138	13,426	925	0.149	97.29	14.51	1.007	0.99966
3952	3	2.38	63	896	1,263	0.050	14.22	0.71	1.033	0.99998
3953	2	7.32	20	6,013	523	0.038	300.65	11.50	1.053	0.99973
3981	3	10.72	18	4,803	1,503	0.012	266.83	3.20	1.059	0.99993
3982	4	7.90	318	26,290	1,768	0.180	82.67	14.87	1.016	0.99966
4031	3	7.36	15	1,226	696	0.022	81.73	1.76	1.000	0.99996
4091	1	1.48	1	89	1,147	0.001	89.00	0.08	1.000	0.99999
4092	1	1.47	9	797	433	0.021	88.56	1.84	1.000	0.99996
4102	19	8.73	1,099	158,510	902	1.218	144.23	175.73	1.218	0.99593
4131	1	4.90	1	294	201	0.005	294.00	1.46	1.000	0.99997
4138	1	1.23	10	748	741	0.013	74.80	1.01	1.000	0.99998
4142	2	2.77	2	166	595	0.003	83.00	0.28	1.000	0.99999
4153	1	1.98	388	46,320	1,310	0.296	119.38	35.36	1.000	0.99918

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4154	1	1.25	31	2,330	1,205	0.026	75.16	1.93	1.000	0.99996
4171	1	4.25	1	255	677	0.001	255.00	0.38	1.000	0.99999
4172	3	2.10	104	4,217	1,724	0.060	40.55	2.45	1.000	0.99994
4173	1	1.10	1	66	633	0.002	66.00	0.10	1.000	0.99999
4182	3	3.49	25	2,912	1,020	0.025	116.48	2.85	1.000	0.99993
4211	2	1.04	2	62	706	0.003	31.00	0.09	1.000	0.99999
4212	1	1.97	1	118	815	0.001	118.00	0.14	1.000	0.99999
4223	3	4.41	76	11,368	823	0.092	149.58	13.81	1.013	0.99968
4302	2	7.01	46	10,159	650	0.071	220.85	15.63	1.022	0.99964
4312	2	3.25	2	195	841	0.002	97.50	0.23	2.000	0.99999
4313	1	0.72	7	303	319	0.022	43.29	0.95	1.000	0.99998
4324	2	5.94	134	23,627	1,252	0.107	176.32	18.87	2.000	0.99956
4332	1	2.70	1	162	304	0.003	162.00	0.53	1.000	0.99999
4333	3	15.28	682	144,146	681	1.001	211.36	211.67	1.406	0.99510
4343	1	1.52	1	91	1,024	0.001	91.00	0.09	1.000	0.99999
4361	1	1.20	32	2,324	795	0.040	72.63	2.92	1.000	0.99993
4363	1	0.67	21	845	1,658	0.013	40.24	0.51	1.000	0.99999
4371	2	1.22	29	674	1,543	0.019	23.24	0.44	1.000	0.99999
4372	2	2.22	4	267	440	0.009	66.75	0.61	1.000	0.99999
4431	2	1.90	2	114	1,385	0.001	57.00	0.08	1.000	0.99999
4432	4	4.46	33	2,207	461	0.072	66.88	4.79	1.031	0.99989
4511	1	0.75	1	45	1,130	0.001	45.00	0.04	1.000	0.99999

HIGHLY CONFIDENTIAL

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4602	4	6.24	84	6,522	948	0.089	77.64	6.88	1.024	0.99984
4714	1	6.52	328	128,428	328	1.000	391.55	391.55	1.000	0.99094
5601	2	10.36	130	72,409	1,163	0.112	556.99	62.26	1.008	0.99856
5603	4	9.51	63	3,534	1,289	0.049	56.10	2.74	1.000	0.99994
5902	3	3.62	35	3,174	1,010	0.035	90.69	3.14	1.167	0.99993
5905	1	1.10	29	1,918	1,872	0.015	66.14	1.02	1.000	0.99998
6021	2	1.29	20	641	1,264	0.016	32.05	0.51	1.000	0.99999
6024	1	0.50	1	30	392	0.003	30.00	0.08	1.000	0.99999
6141	2	2.37	267	10,742	635	0.420	40.23	16.92	1.004	0.99961
	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUSTOMERS SERVED	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
Total:	272	516.44	7,900	1,118,670	164,838	0.048	141.60	6.79	1.130	0.99984

THE EMPIRE DISTRICT ELECTRIC COMPANY
CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI
 4/1/2016 to 4/30/2016
 EXCLUDING MAJOR EVENT DAYS

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1050	5	9.22	300	40,649	1,596	0.188	135.50	25.47	1.282	0.99941
1051	2	9.85	16	1,074	1,067	0.015	67.13	1.01	1.000	0.99998
1052	2	1.40	123	5,962	1,162	0.106	48.47	5.13	1.000	0.99988
1082	4	8.19	16	1,403	1,327	0.012	87.69	1.06	1.143	0.99998
1091	2	9.91	54	25,156	714	0.076	465.85	35.23	1.000	0.99918
1092	2	2.24	21	965	970	0.022	45.95	0.99	1.050	0.99998
1094	3	9.28	3	557	1,234	0.002	185.67	0.45	1.000	0.99999
1141	2	5.43	2	326	903	0.002	163.00	0.36	1.000	0.99999
1142	3	6.72	94	7,774	215	0.437	82.70	36.16	1.011	0.99916
1211	1	0.93	1	56	1,483	0.001	56.00	0.04	1.000	0.99999
1212	1	1.27	1	76	333	0.003	76.00	0.23	1.000	0.99999
1213	4	4.20	12	962	554	0.022	80.17	1.74	1.000	0.99996
1230	2	2.72	104	8,435	1,180	0.088	81.11	7.15	1.010	0.99983
1232	4	11.27	171	30,383	1,179	0.145	177.68	25.77	1.082	0.99940
1243	2	2.90	51	6,555	1,198	0.043	128.53	5.47	1.000	0.99987
1262	1	0.82	1	49	156	0.006	49.00	0.31	1.000	0.99999
1265	2	0.53	21	379	1,282	0.016	18.05	0.30	1.000	0.99999

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1271	1	1.30	12	943	960	0.013	78.58	0.98	1.000	0.99998
1283	1	0.55	1	33	367	0.003	33.00	0.09	1.000	0.99999
1284	1	1.10	1	66	942	0.001	66.00	0.07	1.000	0.99999
1285	3	2.18	3	131	1,090	0.003	43.67	0.12	1.500	0.99999
1286	1	0.25	1	15	44	0.023	15.00	0.34	1.000	0.99999
1312	2	1.22	9	290	934	0.010	32.22	0.31	1.125	0.99999
1451	2	7.07	76	7,106	522	0.146	93.50	13.61	1.013	0.99968
1452	1	2.35	8	1,129	450	0.018	141.13	2.51	1.000	0.99994
1521	2	5.30	8	1,194	359	0.022	149.25	3.33	1.000	0.99992
1523	1	3.80	1	228	722	0.001	228.00	0.32	1.000	0.99999
1843	2	1.06	10	445	1,087	0.009	44.50	0.41	1.000	0.99999
2091	1	1.08	1	65	879	0.001	65.00	0.07	1.000	0.99999
2092	11	19.41	48	5,256	914	0.053	109.50	5.75	1.000	0.99987
2171	2	4.25	81	12,805	819	0.099	158.09	15.63	1.013	0.99964
2212	2	3.96	2	238	1,293	0.002	119.00	0.18	1.000	0.99999
2492	2	8.22	2	493	29	0.069	246.50	17.00	1.000	0.99961
2511	2	3.70	52	5,454	620	0.084	104.88	8.80	1.020	0.99980
2621	1	2.55	1	153	1,169	0.001	153.00	0.13	1.000	0.99999
2961	1	0.65	7	273	648	0.011	39.00	0.42	1.000	0.99999
2962	1	2.80	1	168	257	0.004	168.00	0.65	1.000	0.99998
3082	2	2.84	29	2,645	322	0.090	91.21	8.21	1.000	0.99981
3121	3	5.65	48	4,270	1,129	0.043	88.96	3.78	1.021	0.99991

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3122	2	2.46	2	148	847	0.002	74.00	0.17	1.000	0.99999
3221	2	1.36	8	333	1,239	0.006	41.63	0.27	1.000	0.99999
3222	2	1.92	16	729	770	0.021	45.56	0.95	1.067	0.99998
3231	1	1.10	1	66	413	0.002	66.00	0.16	1.000	0.99999
3302	15	23.51	78	7,632	899	0.087	97.85	8.49	1.054	0.99980
3311	1	0.62	1	37	534	0.002	37.00	0.07	1.000	0.99999
3315	1	0.63	6	229	1,576	0.004	38.17	0.15	1.000	0.99999
3422	1	0.92	1	55	971	0.001	55.00	0.06	1.000	0.99999
3423	1	1.28	1	77	386	0.003	77.00	0.20	1.000	0.99999
3472	4	8.49	12	914	1,579	0.008	76.17	0.58	1.091	0.99999
3551	3	10.83	67	4,717	1,038	0.065	70.40	4.54	1.000	0.99989
3552	1	1.30	15	1,178	568	0.026	78.53	2.07	1.000	0.99995
3553	4	10.49	255	43,691	1,039	0.245	171.34	42.05	1.008	0.99903
3592	6	9.08	21	1,345	1,742	0.012	64.05	0.77	1.105	0.99998
3593	1	2.70	1	162	929	0.001	162.00	0.17	1.000	0.99999
3594	1	0.65	11	435	679	0.016	39.55	0.64	1.000	0.99999
3621	2	4.98	47	8,520	1,560	0.030	181.28	5.46	1.022	0.99987
3663	1	4.28	70	18,058	794	0.088	257.97	22.74	1.000	0.99947
3673	1	1.15	10	696	266	0.038	69.60	2.62	1.000	0.99994
3694	2	2.50	6	523	1,327	0.005	87.17	0.39	1.000	0.99999
3702	2	5.73	16	2,755	609	0.026	172.19	4.52	1.000	0.99990
3751	5	22.97	15	4,771	885	0.017	318.07	5.39	1.250	0.99988

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3871	2	4.05	1,385	131,156	1,385	1.000	94.70	94.70	1.303	0.99781
3872	1	1.30	26	2,043	1,067	0.024	78.58	1.91	1.000	0.99996
3873	3	2.37	16	1,110	793	0.020	69.38	1.40	1.000	0.99997
3878	1	0.67	16	654	1,133	0.014	40.88	0.58	1.000	0.99999
3891	5	10.31	5	619	452	0.011	123.80	1.37	1.000	0.99997
3893	5	11.48	81	5,137	1,109	0.073	63.42	4.63	1.038	0.99989
3901	2	4.98	7	926	878	0.008	132.29	1.05	1.000	0.99998
3903	2	2.75	12	781	298	0.040	65.08	2.62	1.000	0.99994
3913	2	15.65	24	11,549	810	0.030	481.21	14.26	1.000	0.99967
3951	2	7.56	138	13,426	925	0.149	97.29	14.51	1.007	0.99966
3952	3	2.38	63	896	1,263	0.050	14.22	0.71	1.033	0.99998
3953	2	7.32	20	6,013	523	0.038	300.65	11.50	1.053	0.99973
3981	3	10.72	18	4,803	1,503	0.012	266.83	3.20	1.059	0.99993
3982	4	7.90	318	26,290	1,768	0.180	82.67	14.87	1.016	0.99966
4031	3	7.36	15	1,226	696	0.022	81.73	1.76	1.000	0.99996
4091	1	1.48	1	89	1,147	0.001	89.00	0.08	1.000	0.99999
4092	1	1.47	9	797	433	0.021	88.56	1.84	1.000	0.99996
4102	19	8.73	1,099	158,510	902	1.218	144.23	175.73	1.218	0.99593
4131	1	4.90	1	294	201	0.005	294.00	1.46	1.000	0.99997
4138	1	1.23	10	748	741	0.013	74.80	1.01	1.000	0.99998
4142	2	2.77	2	166	595	0.003	83.00	0.28	1.000	0.99999
4153	1	1.98	388	46,320	1,310	0.296	119.38	35.36	1.000	0.99918

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4154	1	1.25	31	2,330	1,205	0.026	75.16	1.93	1.000	0.99996
4171	1	4.25	1	255	677	0.001	255.00	0.38	1.000	0.99999
4172	3	2.10	104	4,217	1,724	0.060	40.55	2.45	1.000	0.99994
4173	1	1.10	1	66	633	0.002	66.00	0.10	1.000	0.99999
4182	3	3.49	25	2,912	1,020	0.025	116.48	2.85	1.000	0.99993
4211	2	1.04	2	62	706	0.003	31.00	0.09	1.000	0.99999
4212	1	1.97	1	118	815	0.001	118.00	0.14	1.000	0.99999
4223	3	4.41	76	11,368	823	0.092	149.58	13.81	1.013	0.99968
4302	2	7.01	46	10,159	650	0.071	220.85	15.63	1.022	0.99964
4312	2	3.25	2	195	841	0.002	97.50	0.23	2.000	0.99999
4313	1	0.72	7	303	319	0.022	43.29	0.95	1.000	0.99998
4324	2	5.94	134	23,627	1,252	0.107	176.32	18.87	2.000	0.99956
4332	1	2.70	1	162	304	0.003	162.00	0.53	1.000	0.99999
4333	3	15.28	682	144,146	681	1.001	211.36	211.67	1.406	0.99510
4343	1	1.52	1	91	1,024	0.001	91.00	0.09	1.000	0.99999
4361	1	1.20	32	2,324	795	0.040	72.63	2.92	1.000	0.99993
4363	1	0.67	21	845	1,658	0.013	40.24	0.51	1.000	0.99999
4371	2	1.22	29	674	1,543	0.019	23.24	0.44	1.000	0.99999
4372	2	2.22	4	267	440	0.009	66.75	0.61	1.000	0.99999
4431	2	1.90	2	114	1,385	0.001	57.00	0.08	1.000	0.99999
4432	4	4.46	33	2,207	461	0.072	66.88	4.79	1.031	0.99989
4511	1	0.75	1	45	1,130	0.001	45.00	0.04	1.000	0.99999

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CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4602	4	6.24	84	6,522	948	0.089	77.64	6.88	1.024	0.99984
4714	1	6.52	328	128,428	328	1.000	391.55	391.55	1.000	0.99094
5601	2	10.36	130	72,409	1,163	0.112	556.99	62.26	1.008	0.99856
5603	4	9.51	63	3,534	1,289	0.049	56.10	2.74	1.000	0.99994
5902	3	3.62	35	3,174	1,010	0.035	90.69	3.14	1.167	0.99993
5905	1	1.10	29	1,918	1,872	0.015	66.14	1.02	1.000	0.99998
6021	2	1.29	20	641	1,264	0.016	32.05	0.51	1.000	0.99999
6024	1	0.50	1	30	392	0.003	30.00	0.08	1.000	0.99999
6141	2	2.37	267	10,742	635	0.420	40.23	16.92	1.004	0.99961
	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUSTOMERS SERVED	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
Total:	272	516.44	7,900	1,118,670	164,838	0.048	141.60	6.79	1.130	0.99984

THE EMPIRE DISTRICT ELECTRIC COMPANY
CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI
 5/1/2016 to 5/31/2016
 INCLUDING MAJOR EVENT DAYS

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1050	6	3.97	519	21,035	1,596	0.325	40.53	13.18	1.006	0.99970
1051	1	0.40	45	1,101	1,067	0.042	24.47	1.03	1.000	0.99998
1052	1	3.13	15	2,829	1,162	0.013	188.60	2.43	1.000	0.99995
1081	3	5.24	3	314	19	0.158	104.67	16.53	1.000	0.99963
1082	7	14.14	27	1,706	1,327	0.020	63.19	1.29	1.125	0.99997
1084	2	5.77	2	346	5	0.400	173.00	69.20	2.000	0.99845
1091	2	4.98	2	299	714	0.003	149.50	0.42	1.000	0.99999
1092	5	6.88	56	2,426	970	0.058	43.32	2.50	1.077	0.99994
1093	1	0.47	1	28	239	0.004	28.00	0.12	1.000	0.99999
1101	7	22.30	521	40,014	978	0.533	76.80	40.91	2.198	0.99908
1211	1	1.12	1	67	1,483	0.001	67.00	0.05	1.000	0.99999
1212	1	0.68	1	41	333	0.003	41.00	0.12	1.000	0.99999
1213	4	4.49	8	587	554	0.014	73.38	1.06	1.000	0.99998
1230	3	4.61	114	10,588	1,180	0.097	92.88	8.97	1.096	0.99980
1232	4	4.12	140	5,533	1,179	0.119	39.52	4.69	1.014	0.99989
1241	2	1.79	2	107	852	0.002	53.50	0.13	1.000	0.99999
1242	2	1.55	701	48,917	679	1.032	69.78	72.04	1.032	0.99839

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1243	1	0.90	1	54	1,198	0.001	54.00	0.05	1.000	0.99999
1263	2	1.79	37	2,023	1,136	0.033	54.68	1.78	1.000	0.99996
1265	1	0.65	1	39	1,282	0.001	39.00	0.03	1.000	0.99999
1284	1	0.43	1	26	942	0.001	26.00	0.03	1.000	0.99999
1285	1	5.87	55	19,371	1,090	0.050	352.20	17.77	1.000	0.99960
1311	8	3.77	13	381	272	0.048	29.31	1.40	1.000	0.99997
1312	2	2.25	31	2,109	934	0.033	68.03	2.26	1.000	0.99995
1451	1	1.42	12	1,022	522	0.023	85.17	1.96	1.000	0.99996
1452	7	3.25	63	1,619	450	0.140	25.70	3.60	1.033	0.99992
1453	1	1.22	5	367	1,786	0.003	73.40	0.21	1.000	0.99999
1454	1	2.35	1	141	935	0.001	141.00	0.15	1.000	0.99999
1455	2	2.25	17	1,110	388	0.044	65.29	2.86	1.000	0.99994
1521	1	1.20	1	72	359	0.003	72.00	0.20	1.000	0.99999
1523	1	0.62	22	833	722	0.030	37.86	1.15	1.000	0.99997
1841	1	0.77	19	886	647	0.029	46.63	1.37	1.000	0.99997
1842	2	3.27	2	196	281	0.007	98.00	0.70	1.000	0.99998
1843	1	0.77	1	46	1,087	0.001	46.00	0.04	1.000	0.99999
2052	2	3.10	2	186	85	0.024	93.00	2.19	1.000	0.99995
2092	1	0.40	16	384	914	0.018	24.00	0.42	1.000	0.99999
2171	4	3.91	21	1,252	819	0.026	59.62	1.53	1.000	0.99997
2172	1	1.78	1	107	225	0.004	107.00	0.48	1.000	0.99999
2211	1	1.20	1	72	722	0.001	72.00	0.10	1.000	0.99999

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
2212	1	0.92	1	55	1,293	0.001	55.00	0.04	1.000	0.99999
2511	1	1.23	5	372	620	0.008	74.40	0.60	1.000	0.99999
2621	3	5.95	1,254	83,035	1,169	1.073	66.22	71.03	1.206	0.99841
2921	1	2.22	15	2,005	375	0.040	133.67	5.35	1.000	0.99988
2951	2	1.48	2	89	1,386	0.001	44.50	0.06	1.000	0.99999
3081	1	1.32	1	79	573	0.002	79.00	0.14	1.000	0.99999
3121	2	2.08	86	8,661	1,129	0.076	100.71	7.67	1.012	0.99983
3122	5	5.20	63	4,628	847	0.074	73.46	5.46	1.000	0.99988
3123	1	0.58	1	35	700	0.001	35.00	0.05	1.000	0.99999
3221	1	0.50	17	519	1,239	0.014	30.53	0.42	1.000	0.99999
3222	9	19.88	27	3,416	770	0.035	126.52	4.44	1.125	0.99990
3232	2	4.62	5	747	431	0.012	149.40	1.73	1.000	0.99996
3311	2	1.53	39	1,770	534	0.073	45.38	3.31	1.026	0.99993
3315	2	1.22	37	1,369	1,576	0.023	37.00	0.87	1.000	0.99998
3422	4	5.32	17	1,448	971	0.018	85.18	1.49	1.000	0.99997
3471	1	1.35	1	81	170	0.006	81.00	0.48	1.000	0.99999
3472	3	7.85	112	21,152	1,579	0.071	188.86	13.40	1.018	0.99970
3553	1	0.78	1	47	1,039	0.001	47.00	0.05	1.000	0.99999
3591	1	0.80	1	48	1,203	0.001	48.00	0.04	1.000	0.99999
3592	1	1.03	42	2,634	1,742	0.024	62.71	1.51	1.000	0.99997
3593	1	0.50	9	271	929	0.010	30.11	0.29	1.000	0.99999
3661	4	4.03	86	3,465	1,028	0.084	40.29	3.37	1.012	0.99992

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3662	3	2.07	779	13,239	777	1.003	16.99	17.04	1.003	0.99962
3663	1	2.62	1	157	794	0.001	157.00	0.20	1.000	0.99999
3664	2	1.38	2	83	517	0.004	41.50	0.16	1.000	0.99999
3672	1	1.30	38	2,976	137	0.277	78.32	21.72	1.000	0.99951
3673	1	1.02	4	244	266	0.015	61.00	0.92	1.000	0.99998
3691	1	1.92	20	2,316	1,163	0.017	115.80	1.99	1.000	0.99996
3692	2	2.75	103	10,143	410	0.251	98.48	24.74	1.000	0.99945
3693	2	1.52	27	2,197	186	0.145	81.37	11.81	1.038	0.99974
3702	1	4.80	8	2,308	609	0.013	288.50	3.79	1.000	0.99992
3751	1	1.70	1	102	885	0.001	102.00	0.12	1.000	0.99999
3871	1	1.55	12	1,120	1,385	0.009	93.33	0.81	1.000	0.99998
3872	1	1.30	15	1,178	1,067	0.014	78.53	1.10	1.000	0.99998
3874	1	0.65	180	7,083	180	1.000	39.35	39.35	1.000	0.99912
3891	1	1.63	31	3,061	452	0.069	98.74	6.77	1.000	0.99985
3892	1	12.33	6	4,442	501	0.012	740.33	8.87	1.000	0.99980
3893	1	1.07	1	64	1,109	0.001	64.00	0.06	1.000	0.99999
3903	2	2.33	12	985	298	0.040	82.08	3.31	1.000	0.99993
3913	1	0.65	24	958	810	0.030	39.92	1.18	1.000	0.99997
3914	3	8.23	73	13,684	373	0.196	187.45	36.69	1.738	0.99918
3951	4	4.06	115	6,632	925	0.124	57.67	7.17	1.095	0.99984
3952	4	3.57	17	1,124	1,263	0.013	66.12	0.89	1.000	0.99998
3953	3	4.04	55	5,570	523	0.105	101.27	10.65	1.038	0.99976

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3981	5	8.84	1,614	377,103	1,503	1.074	233.64	250.90	1.074	0.99438
3982	1	0.97	52	3,062	1,768	0.029	58.88	1.73	1.000	0.99996
3992	1	1.22	1	73	166	0.006	73.00	0.44	1.000	0.99999
4031	5	8.05	142	22,110	696	0.204	155.70	31.77	1.029	0.99929
4091	5	5.83	88	4,784	1,147	0.077	54.36	4.17	1.000	0.99991
4101	1	0.80	1	48	584	0.002	48.00	0.08	1.000	0.99999
4102	3	2.50	91	6,652	902	0.101	73.10	7.37	1.011	0.99983
4131	1	0.57	1	34	201	0.005	34.00	0.17	1.000	0.99999
4134	1	1.12	1	67	833	0.001	67.00	0.08	1.000	0.99999
4137	15	2.00	136	1,524	794	0.171	11.21	1.92	1.015	0.99996
4138	2	2.10	14	1,159	741	0.019	82.79	1.56	1.000	0.99996
4141	1	1.35	1	81	82	0.012	81.00	0.99	1.000	0.99998
4153	3	3.52	47	2,189	1,310	0.036	46.57	1.67	1.068	0.99996
4155	9	7.47	2,053	114,052	2,099	0.978	55.55	54.34	1.024	0.99878
4171	4	5.84	13	740	677	0.019	56.92	1.09	1.000	0.99998
4172	12	9.25	314	15,191	1,724	0.182	48.38	8.81	1.000	0.99980
4211	3	2.15	6	271	706	0.008	45.17	0.38	1.000	0.99999
4212	3	5.40	22	5,080	815	0.027	230.91	6.23	1.100	0.99986
4222	2	2.27	1,055	73,155	1,044	1.011	69.34	70.07	1.011	0.99843
4223	3	2.67	835	51,868	823	1.015	62.12	63.02	1.015	0.99859
4302	2	2.95	2	177	650	0.003	88.50	0.27	2.000	0.99999
4311	1	0.68	57	2,380	791	0.072	41.75	3.01	1.000	0.99993

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4313	1	1.48	7	629	319	0.022	89.86	1.97	1.000	0.99996
4324	2	2.07	42	1,630	1,252	0.034	38.81	1.30	1.000	0.99997
4341	2	1.65	2	99	1,780	0.001	49.50	0.06	2.000	0.99999
4342	14	8.36	54	1,652	1,748	0.031	30.59	0.95	1.000	0.99998
4343	1	1.03	2	124	1,024	0.002	62.00	0.12	1.000	0.99999
4361	1	2.57	28	4,326	795	0.035	154.50	5.44	1.000	0.99988
4362	1	0.87	24	1,235	828	0.029	51.46	1.49	1.000	0.99997
4363	3	2.33	44	1,907	1,658	0.027	43.34	1.15	1.023	0.99997
4371	9	13.68	57	4,909	1,543	0.037	86.12	3.18	1.096	0.99993
4372	2	3.20	60	7,920	440	0.136	132.00	18.00	1.017	0.99960
4383	1	1.58	63	5,953	146	0.432	94.49	40.77	1.000	0.99909
4385	1	4.88	1	293	1,109	0.001	293.00	0.26	1.000	0.99999
4386	1	1.40	64	5,351	1,652	0.039	83.61	3.24	1.000	0.99993
4431	4	4.14	33	1,785	1,385	0.024	54.09	1.29	1.000	0.99997
4432	4	3.99	62	3,626	461	0.134	58.48	7.87	1.000	0.99982
4511	2	5.39	1,146	76,698	1,130	1.014	66.93	67.87	1.014	0.99848
4714	1	1.83	24	2,641	328	0.073	110.04	8.05	1.000	0.99982
5601	3	2.48	515	50,556	1,163	0.443	98.17	43.47	1.038	0.99903
5602	1	0.58	11	393	681	0.016	35.73	0.58	1.000	0.99999
5603	2	1.16	70	2,190	1,289	0.054	31.29	1.70	1.000	0.99996
5904	3	4.61	52	3,646	1,223	0.043	70.12	2.98	1.000	0.99993
5905	1	0.95	29	1,662	1,872	0.015	57.31	0.89	1.000	0.99998

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CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
6021	4	3.11	51	1,613	1,264	0.040	31.63	1.28	1.020	0.99997
6022	1	0.77	18	839	490	0.037	46.61	1.71	1.000	0.99996
6024	2	2.11	26	1,671	392	0.066	64.27	4.26	2.000	0.99990
6141	2	0.83	2	50	635	0.003	25.00	0.08	1.000	0.99999
6143	1	1.18	50	3,558	371	0.135	71.16	9.59	1.000	0.99979
	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUSTOMERS SERVED	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
Total:	335	417.47	14,910	1,252,582	164,838	0.090	84.01	7.60	1.036	0.99983

THE EMPIRE DISTRICT ELECTRIC COMPANY
CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI
 5/1/2016 to 5/31/2016
 EXCLUDING MAJOR EVENT DAYS

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1050	6	3.97	519	21,035	1,596	0.325	40.53	13.18	1.006	0.99970
1051	1	0.40	45	1,101	1,067	0.042	24.47	1.03	1.000	0.99998
1052	1	3.13	15	2,829	1,162	0.013	188.60	2.43	1.000	0.99995
1081	3	5.24	3	314	19	0.158	104.67	16.53	1.000	0.99963
1082	7	14.14	27	1,706	1,327	0.020	63.19	1.29	1.125	0.99997
1084	2	5.77	2	346	5	0.400	173.00	69.20	2.000	0.99845
1091	2	4.98	2	299	714	0.003	149.50	0.42	1.000	0.99999
1092	5	6.88	56	2,426	970	0.058	43.32	2.50	1.077	0.99994
1093	1	0.47	1	28	239	0.004	28.00	0.12	1.000	0.99999
1101	7	22.30	521	40,014	978	0.533	76.80	40.91	2.198	0.99908
1211	1	1.12	1	67	1,483	0.001	67.00	0.05	1.000	0.99999
1212	1	0.68	1	41	333	0.003	41.00	0.12	1.000	0.99999
1213	4	4.49	8	587	554	0.014	73.38	1.06	1.000	0.99998
1230	3	4.61	114	10,588	1,180	0.097	92.88	8.97	1.096	0.99980
1232	4	4.12	140	5,533	1,179	0.119	39.52	4.69	1.014	0.99989
1241	2	1.79	2	107	852	0.002	53.50	0.13	1.000	0.99999
1242	2	1.55	701	48,917	679	1.032	69.78	72.04	1.032	0.99839

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1243	1	0.90	1	54	1,198	0.001	54.00	0.05	1.000	0.99999
1263	2	1.79	37	2,023	1,136	0.033	54.68	1.78	1.000	0.99996
1265	1	0.65	1	39	1,282	0.001	39.00	0.03	1.000	0.99999
1284	1	0.43	1	26	942	0.001	26.00	0.03	1.000	0.99999
1285	1	5.87	55	19,371	1,090	0.050	352.20	17.77	1.000	0.99960
1311	8	3.77	13	381	272	0.048	29.31	1.40	1.000	0.99997
1312	2	2.25	31	2,109	934	0.033	68.03	2.26	1.000	0.99995
1451	1	1.42	12	1,022	522	0.023	85.17	1.96	1.000	0.99996
1452	7	3.25	63	1,619	450	0.140	25.70	3.60	1.033	0.99992
1453	1	1.22	5	367	1,786	0.003	73.40	0.21	1.000	0.99999
1454	1	2.35	1	141	935	0.001	141.00	0.15	1.000	0.99999
1455	2	2.25	17	1,110	388	0.044	65.29	2.86	1.000	0.99994
1521	1	1.20	1	72	359	0.003	72.00	0.20	1.000	0.99999
1523	1	0.62	22	833	722	0.030	37.86	1.15	1.000	0.99997
1841	1	0.77	19	886	647	0.029	46.63	1.37	1.000	0.99997
1842	2	3.27	2	196	281	0.007	98.00	0.70	1.000	0.99998
1843	1	0.77	1	46	1,087	0.001	46.00	0.04	1.000	0.99999
2052	2	3.10	2	186	85	0.024	93.00	2.19	1.000	0.99995
2092	1	0.40	16	384	914	0.018	24.00	0.42	1.000	0.99999
2171	4	3.91	21	1,252	819	0.026	59.62	1.53	1.000	0.99997
2172	1	1.78	1	107	225	0.004	107.00	0.48	1.000	0.99999
2211	1	1.20	1	72	722	0.001	72.00	0.10	1.000	0.99999

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
2212	1	0.92	1	55	1,293	0.001	55.00	0.04	1.000	0.99999
2511	1	1.23	5	372	620	0.008	74.40	0.60	1.000	0.99999
2621	3	5.95	1,254	83,035	1,169	1.073	66.22	71.03	1.206	0.99841
2921	1	2.22	15	2,005	375	0.040	133.67	5.35	1.000	0.99988
2951	2	1.48	2	89	1,386	0.001	44.50	0.06	1.000	0.99999
3081	1	1.32	1	79	573	0.002	79.00	0.14	1.000	0.99999
3121	2	2.08	86	8,661	1,129	0.076	100.71	7.67	1.012	0.99983
3122	5	5.20	63	4,628	847	0.074	73.46	5.46	1.000	0.99988
3123	1	0.58	1	35	700	0.001	35.00	0.05	1.000	0.99999
3221	1	0.50	17	519	1,239	0.014	30.53	0.42	1.000	0.99999
3222	9	19.88	27	3,416	770	0.035	126.52	4.44	1.125	0.99990
3232	2	4.62	5	747	431	0.012	149.40	1.73	1.000	0.99996
3311	2	1.53	39	1,770	534	0.073	45.38	3.31	1.026	0.99993
3315	2	1.22	37	1,369	1,576	0.023	37.00	0.87	1.000	0.99998
3422	4	5.32	17	1,448	971	0.018	85.18	1.49	1.000	0.99997
3471	1	1.35	1	81	170	0.006	81.00	0.48	1.000	0.99999
3472	3	7.85	112	21,152	1,579	0.071	188.86	13.40	1.018	0.99970
3553	1	0.78	1	47	1,039	0.001	47.00	0.05	1.000	0.99999
3591	1	0.80	1	48	1,203	0.001	48.00	0.04	1.000	0.99999
3592	1	1.03	42	2,634	1,742	0.024	62.71	1.51	1.000	0.99997
3593	1	0.50	9	271	929	0.010	30.11	0.29	1.000	0.99999
3661	4	4.03	86	3,465	1,028	0.084	40.29	3.37	1.012	0.99992

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3662	3	2.07	779	13,239	777	1.003	16.99	17.04	1.003	0.99962
3663	1	2.62	1	157	794	0.001	157.00	0.20	1.000	0.99999
3664	2	1.38	2	83	517	0.004	41.50	0.16	1.000	0.99999
3672	1	1.30	38	2,976	137	0.277	78.32	21.72	1.000	0.99951
3673	1	1.02	4	244	266	0.015	61.00	0.92	1.000	0.99998
3691	1	1.92	20	2,316	1,163	0.017	115.80	1.99	1.000	0.99996
3692	2	2.75	103	10,143	410	0.251	98.48	24.74	1.000	0.99945
3693	2	1.52	27	2,197	186	0.145	81.37	11.81	1.038	0.99974
3702	1	4.80	8	2,308	609	0.013	288.50	3.79	1.000	0.99992
3751	1	1.70	1	102	885	0.001	102.00	0.12	1.000	0.99999
3871	1	1.55	12	1,120	1,385	0.009	93.33	0.81	1.000	0.99998
3872	1	1.30	15	1,178	1,067	0.014	78.53	1.10	1.000	0.99998
3874	1	0.65	180	7,083	180	1.000	39.35	39.35	1.000	0.99912
3891	1	1.63	31	3,061	452	0.069	98.74	6.77	1.000	0.99985
3892	1	12.33	6	4,442	501	0.012	740.33	8.87	1.000	0.99980
3893	1	1.07	1	64	1,109	0.001	64.00	0.06	1.000	0.99999
3903	2	2.33	12	985	298	0.040	82.08	3.31	1.000	0.99993
3913	1	0.65	24	958	810	0.030	39.92	1.18	1.000	0.99997
3914	3	8.23	73	13,684	373	0.196	187.45	36.69	1.738	0.99918
3951	4	4.06	115	6,632	925	0.124	57.67	7.17	1.095	0.99984
3952	4	3.57	17	1,124	1,263	0.013	66.12	0.89	1.000	0.99998
3953	3	4.04	55	5,570	523	0.105	101.27	10.65	1.038	0.99976

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3981	5	8.84	1,614	377,103	1,503	1.074	233.64	250.90	1.074	0.99438
3982	1	0.97	52	3,062	1,768	0.029	58.88	1.73	1.000	0.99996
3992	1	1.22	1	73	166	0.006	73.00	0.44	1.000	0.99999
4031	5	8.05	142	22,110	696	0.204	155.70	31.77	1.029	0.99929
4091	5	5.83	88	4,784	1,147	0.077	54.36	4.17	1.000	0.99991
4101	1	0.80	1	48	584	0.002	48.00	0.08	1.000	0.99999
4102	3	2.50	91	6,652	902	0.101	73.10	7.37	1.011	0.99983
4131	1	0.57	1	34	201	0.005	34.00	0.17	1.000	0.99999
4134	1	1.12	1	67	833	0.001	67.00	0.08	1.000	0.99999
4137	15	2.00	136	1,524	794	0.171	11.21	1.92	1.015	0.99996
4138	2	2.10	14	1,159	741	0.019	82.79	1.56	1.000	0.99996
4141	1	1.35	1	81	82	0.012	81.00	0.99	1.000	0.99998
4153	3	3.52	47	2,189	1,310	0.036	46.57	1.67	1.068	0.99996
4155	9	7.47	2,053	114,052	2,099	0.978	55.55	54.34	1.024	0.99878
4171	4	5.84	13	740	677	0.019	56.92	1.09	1.000	0.99998
4172	12	9.25	314	15,191	1,724	0.182	48.38	8.81	1.000	0.99980
4211	3	2.15	6	271	706	0.008	45.17	0.38	1.000	0.99999
4212	3	5.40	22	5,080	815	0.027	230.91	6.23	1.100	0.99986
4222	2	2.27	1,055	73,155	1,044	1.011	69.34	70.07	1.011	0.99843
4223	3	2.67	835	51,868	823	1.015	62.12	63.02	1.015	0.99859
4302	2	2.95	2	177	650	0.003	88.50	0.27	2.000	0.99999
4311	1	0.68	57	2,380	791	0.072	41.75	3.01	1.000	0.99993

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4313	1	1.48	7	629	319	0.022	89.86	1.97	1.000	0.99996
4324	2	2.07	42	1,630	1,252	0.034	38.81	1.30	1.000	0.99997
4341	2	1.65	2	99	1,780	0.001	49.50	0.06	2.000	0.99999
4342	14	8.36	54	1,652	1,748	0.031	30.59	0.95	1.000	0.99998
4343	1	1.03	2	124	1,024	0.002	62.00	0.12	1.000	0.99999
4361	1	2.57	28	4,326	795	0.035	154.50	5.44	1.000	0.99988
4362	1	0.87	24	1,235	828	0.029	51.46	1.49	1.000	0.99997
4363	3	2.33	44	1,907	1,658	0.027	43.34	1.15	1.023	0.99997
4371	9	13.68	57	4,909	1,543	0.037	86.12	3.18	1.096	0.99993
4372	2	3.20	60	7,920	440	0.136	132.00	18.00	1.017	0.99960
4383	1	1.58	63	5,953	146	0.432	94.49	40.77	1.000	0.99909
4385	1	4.88	1	293	1,109	0.001	293.00	0.26	1.000	0.99999
4386	1	1.40	64	5,351	1,652	0.039	83.61	3.24	1.000	0.99993
4431	4	4.14	33	1,785	1,385	0.024	54.09	1.29	1.000	0.99997
4432	4	3.99	62	3,626	461	0.134	58.48	7.87	1.000	0.99982
4511	2	5.39	1,146	76,698	1,130	1.014	66.93	67.87	1.014	0.99848
4714	1	1.83	24	2,641	328	0.073	110.04	8.05	1.000	0.99982
5601	3	2.48	515	50,556	1,163	0.443	98.17	43.47	1.038	0.99903
5602	1	0.58	11	393	681	0.016	35.73	0.58	1.000	0.99999
5603	2	1.16	70	2,190	1,289	0.054	31.29	1.70	1.000	0.99996
5904	3	4.61	52	3,646	1,223	0.043	70.12	2.98	1.000	0.99993
5905	1	0.95	29	1,662	1,872	0.015	57.31	0.89	1.000	0.99998

HIGHLY CONFIDENTIAL

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
6021	4	3.11	51	1,613	1,264	0.040	31.63	1.28	1.020	0.99997
6022	1	0.77	18	839	490	0.037	46.61	1.71	1.000	0.99996
6024	2	2.11	26	1,671	392	0.066	64.27	4.26	2.000	0.99990
6141	2	0.83	2	50	635	0.003	25.00	0.08	1.000	0.99999
6143	1	1.18	50	3,558	371	0.135	71.16	9.59	1.000	0.99979
	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUSTOMERS SERVED	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
Total:	335	417.47	14,910	1,252,582	164,838	0.090	84.01	7.60	1.036	0.99983

THE EMPIRE DISTRICT ELECTRIC COMPANY
CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI
 6/1/2016 to 6/30/2016
 INCLUDING MAJOR EVENT DAYS

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1050	5	4.27	584	33,767	1,596	0.366	57.82	21.16	1.032	0.99951
1051	2	3.16	12	1,718	1,067	0.011	143.17	1.61	1.000	0.99996
1052	2	1.92	165	10,215	1,162	0.142	61.91	8.79	1.000	0.99980
1082	7	10.11	7	607	1,328	0.005	86.71	0.46	1.000	0.99999
1091	3	5.99	3	359	715	0.004	119.67	0.50	1.000	0.99999
1092	3	5.70	238	13,124	970	0.245	55.14	13.53	1.097	0.99969
1093	2	2.79	29	2,638	239	0.121	90.97	11.04	1.000	0.99974
1094	3	5.15	13	1,379	1,234	0.011	106.08	1.12	1.083	0.99997
1101	2	6.31	212	40,313	978	0.217	190.16	41.22	2.000	0.99905
1102	4	4.64	6	413	465	0.013	68.83	0.89	1.200	0.99998
1141	3	3.84	905	99,901	902	1.003	110.39	110.75	4.289	0.99744
1211	7	11.93	179	14,123	1,482	0.121	78.90	9.53	1.011	0.99978
1232	1	2.10	46	5,791	1,180	0.039	125.89	4.91	1.000	0.99989
1233	1	1.55	1	93	640	0.002	93.00	0.15	1.000	0.99999
1241	5	10.40	881	57,257	852	1.034	64.99	67.20	1.051	0.99844
1242	1	2.02	8	975	680	0.012	121.88	1.43	1.000	0.99997
1243	5	7.83	17	1,337	1,198	0.014	78.65	1.12	1.000	0.99997

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1263	3	4.30	64	5,728	1,135	0.056	89.50	5.05	1.000	0.99988
1271	7	6.48	1,962	84,332	960	2.044	42.98	87.85	2.033	0.99797
1272	1	0.30	14	255	14	1.000	18.21	18.21	1.000	0.99958
1273	2	3.05	937	36,677	865	1.083	39.14	42.40	1.083	0.99902
1274	1	0.30	4	75	4	1.000	18.75	18.75	1.000	0.99957
1282	1	1.23	93	6,930	1,035	0.090	74.52	6.70	1.000	0.99985
1285	2	2.58	1,143	46,417	1,090	1.049	40.61	42.58	1.049	0.99901
1311	2	1.36	2	82	272	0.007	41.00	0.30	1.000	0.99999
1312	4	2.52	49	2,424	934	0.052	49.47	2.60	1.043	0.99994
1452	1	0.82	19	948	450	0.042	49.89	2.11	1.000	0.99995
1453	2	2.43	9	434	1,789	0.005	48.22	0.24	1.000	0.99999
1454	3	6.18	203	17,024	935	0.217	83.86	18.21	1.000	0.99958
1521	2	1.57	2	94	360	0.006	47.00	0.26	2.000	0.99999
1522	1	0.75	4	183	102	0.039	45.75	1.79	1.000	0.99996
1523	1	0.98	1	59	722	0.001	59.00	0.08	1.000	0.99999
1841	1	4.08	1	245	648	0.002	245.00	0.38	1.000	0.99999
1843	1	0.43	1	26	1,086	0.001	26.00	0.02	1.000	0.99999
2051	1	0.58	1	35	162	0.006	35.00	0.22	1.000	0.99999
2091	6	10.97	146	29,951	879	0.166	205.14	34.07	1.074	0.99921
2092	2	3.55	28	2,031	916	0.031	72.54	2.22	1.000	0.99995
2171	3	3.20	3	192	691	0.004	64.00	0.28	1.000	0.99999
2211	1	1.18	77	5,468	722	0.107	71.01	7.57	1.000	0.99982

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
2212	2	1.96	2	118	1,294	0.002	59.00	0.09	1.000	0.99999
2511	1	1.08	620	40,403	619	1.002	65.17	65.27	1.000	0.99849
2621	1	1.15	54	3,767	1,168	0.046	69.76	3.23	1.000	0.99993
2622	1	1.65	7	695	113	0.062	99.29	6.15	1.000	0.99986
2951	2	2.45	37	1,522	1,388	0.027	41.14	1.10	1.000	0.99997
2961	1	1.35	23	1,871	648	0.035	81.35	2.89	1.000	0.99993
3122	4	5.71	45	1,954	848	0.053	43.42	2.30	1.023	0.99995
3123	1	0.45	1	27	701	0.001	27.00	0.04	1.000	0.99999
3181	1	1.10	1	66	724	0.001	66.00	0.09	1.000	0.99999
3221	3	8.18	10	1,169	1,240	0.008	116.90	0.94	1.111	0.99998
3222	1	1.50	1	90	770	0.001	90.00	0.12	1.000	0.99999
3231	2	2.07	5	301	413	0.012	60.20	0.73	1.000	0.99998
3303	1	3.37	10	2,027	979	0.010	202.70	2.07	1.000	0.99995
3313	3	3.79	3	227	1,327	0.002	75.67	0.17	1.000	0.99999
3315	2	1.18	53	1,869	1,577	0.034	35.26	1.19	1.019	0.99997
3422	1	1.57	2	188	972	0.002	94.00	0.19	1.000	0.99999
3423	1	0.72	1	43	386	0.003	43.00	0.11	1.000	0.99999
3471	3	1.55	3	93	170	0.018	31.00	0.55	3.000	0.99999
3472	6	4.05	6	243	1,579	0.004	40.50	0.15	1.000	0.99999
3552	3	2.45	34	1,477	568	0.060	43.44	2.60	1.000	0.99994
3591	3	3.54	18	675	1,204	0.015	37.50	0.56	1.000	0.99999
3592	8	16.81	32	2,789	1,740	0.018	87.16	1.60	1.000	0.99996

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3593	3	14.03	40	11,929	929	0.043	298.23	12.84	1.000	0.99970
3594	1	1.15	11	766	680	0.016	69.64	1.13	1.000	0.99997
3621	3	3.95	1,585	152,960	1,560	1.016	96.50	98.05	1.017	0.99773
3661	4	3.97	63	4,153	1,028	0.061	65.92	4.04	1.033	0.99991
3662	6	5.02	42	2,285	778	0.054	54.40	2.94	1.000	0.99993
3663	3	4.11	146	11,282	794	0.184	77.27	14.21	1.074	0.99967
3664	8	11.15	89	9,612	517	0.172	108.00	18.59	1.000	0.99957
3675	1	0.78	64	3,024	415	0.154	47.25	7.29	1.000	0.99983
3692	1	1.07	1	64	410	0.002	64.00	0.16	1.000	0.99999
3694	1	0.77	45	2,108	1,328	0.034	46.84	1.59	1.000	0.99996
3701	2	2.83	485	38,880	485	1.000	80.16	80.16	1.336	0.99814
3702	1	2.10	14	1,764	610	0.023	126.00	2.89	1.000	0.99993
3751	3	3.64	56	4,876	885	0.063	87.07	5.51	1.000	0.99987
3871	2	2.00	52	3,933	1,386	0.038	75.63	2.84	1.020	0.99993
3872	1	1.38	13	1,091	1,067	0.012	83.92	1.02	1.000	0.99998
3878	2	2.58	20	1,432	1,136	0.018	71.60	1.26	1.000	0.99997
3891	5	3.95	35	2,162	452	0.077	61.77	4.78	1.029	0.99989
3893	5	13.75	24	5,011	1,110	0.022	208.79	4.51	1.043	0.99990
3901	7	63.47	37	29,248	879	0.042	790.49	33.27	1.947	0.99923
3903	1	1.42	28	2,406	298	0.094	85.93	8.07	1.000	0.99981
3912	2	2.22	2	133	1,141	0.002	66.50	0.12	1.000	0.99999
3913	1	1.35	112	9,144	810	0.138	81.64	11.29	1.000	0.99974

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3914	2	2.11	12	514	373	0.032	42.83	1.38	1.000	0.99997
3951	10	17.23	253	37,604	926	0.273	148.63	40.61	1.059	0.99906
3952	6	9.60	12	2,131	1,264	0.009	177.58	1.69	1.000	0.99996
3953	6	18.84	531	77,273	523	1.015	145.52	147.75	1.019	0.99658
3971	2	2.04	18	907	665	0.027	50.39	1.36	1.059	0.99997
3981	3	6.86	14	1,318	1,503	0.009	94.14	0.88	1.000	0.99998
3982	3	1.75	45	2,092	1,768	0.025	46.49	1.18	1.000	0.99997
3991	7	4.47	10	338	726	0.014	33.80	0.47	1.250	0.99999
4031	4	6.55	109	17,437	696	0.157	159.97	25.05	1.028	0.99942
4091	3	3.55	36	3,316	1,148	0.031	92.11	2.89	1.000	0.99993
4092	3	4.48	435	32,237	434	1.002	74.11	74.28	1.005	0.99828
4101	2	2.85	18	1,425	586	0.031	79.17	2.43	1.059	0.99994
4102	1	1.87	17	1,915	902	0.019	112.65	2.12	1.000	0.99995
4133	2	2.32	649	45,496	640	1.014	70.10	71.09	1.014	0.99835
4137	3	6.32	40	5,898	794	0.050	147.45	7.43	1.026	0.99983
4138	2	2.21	59	3,144	742	0.080	53.29	4.24	1.000	0.99990
4151	3	9.18	34	3,933	1,242	0.027	115.68	3.17	1.030	0.99993
4152	1	0.92	7	391	818	0.009	55.86	0.48	1.000	0.99999
4153	3	5.56	16	1,257	1,297	0.012	78.56	0.97	1.000	0.99998
4155	11	21.71	564	128,029	2,116	0.267	227.00	60.51	1.819	0.99860
4171	3	1.24	16	622	677	0.024	38.88	0.92	1.067	0.99998
4172	10	15.01	173	12,722	1,724	0.100	73.54	7.38	1.012	0.99983

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4182	1	1.37	1	82	1,022	0.001	82.00	0.08	1.000	0.99999
4211	4	3.35	72	3,600	706	0.102	50.00	5.10	1.000	0.99988
4212	3	4.37	817	88,201	815	1.002	107.96	108.22	1.002	0.99749
4222	6	6.25	49	4,561	1,044	0.047	93.08	4.37	1.065	0.99990
4224	1	1.33	1	80	755	0.001	80.00	0.11	1.000	0.99999
4303	3	6.65	8	1,058	976	0.008	132.25	1.08	1.000	0.99997
4311	1	0.67	791	31,640	791	1.000	40.00	40.00	1.000	0.99907
4312	1	0.92	841	46,829	842	0.999	55.68	55.62	1.000	0.99871
4313	1	0.58	319	11,436	320	0.997	35.85	35.74	1.000	0.99917
4324	5	3.09	159	3,710	1,252	0.127	23.33	2.96	1.006	0.99993
4331	1	1.58	5	477	304	0.016	95.40	1.57	1.000	0.99996
4341	10	20.01	75	7,290	1,782	0.042	97.20	4.09	1.000	0.99991
4342	19	29.29	107	9,445	1,750	0.061	88.27	5.40	1.115	0.99988
4343	9	20.02	1,121	115,814	1,024	1.095	103.31	113.10	1.095	0.99738
4361	1	0.53	28	912	796	0.035	32.57	1.15	1.000	0.99997
4362	3	8.73	3	524	828	0.004	174.67	0.63	1.000	0.99999
4363	7	11.12	83	4,393	1,660	0.050	52.93	2.65	1.051	0.99994
4371	9	9.94	61	4,829	1,543	0.040	79.16	3.13	1.070	0.99993
4372	5	4.71	5	283	440	0.011	56.60	0.64	1.000	0.99999
4373	5	5.37	10	643	776	0.013	64.30	0.83	1.111	0.99998
4383	1	1.43	1	86	146	0.007	86.00	0.59	1.000	0.99999
4385	1	2.25	5	675	1,115	0.004	135.00	0.61	1.000	0.99999

HIGHLY CONFIDENTIAL

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4431	5	10.14	11	1,596	1,386	0.008	145.09	1.15	1.000	0.99997
4432	1	1.07	1	64	462	0.002	64.00	0.14	1.000	0.99999
4511	2	2.00	57	2,921	1,131	0.050	51.25	2.58	1.000	0.99994
4602	4	4.20	248	19,208	948	0.262	77.45	20.26	1.908	0.99953
4692	1	0.95	28	1,618	470	0.060	57.79	3.44	1.000	0.99992
4714	2	3.08	16	1,347	328	0.049	84.19	4.11	1.067	0.99990
5601	3	2.47	117	5,720	1,164	0.101	48.89	4.91	1.000	0.99989
5603	6	4.86	1,581	93,107	1,288	1.227	58.89	72.29	1.227	0.99833
5902	3	5.28	26	4,128	1,006	0.026	158.77	4.10	1.000	0.99991
5904	3	7.14	10	2,410	1,223	0.008	241.00	1.97	1.000	0.99995
5905	4	5.31	119	6,212	1,874	0.064	52.20	3.31	1.000	0.99992
6021	1	0.77	8	371	1,270	0.006	46.38	0.29	1.000	0.99999
6141	1	1.05	20	1,276	635	0.031	63.80	2.01	1.000	0.99995
6142	5	9.10	79	14,869	308	0.256	188.22	48.28	1.681	0.99888
	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUSTOMERS SERVED	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
Total:	446	710.57	21,952	1,754,911	164,819	0.133	79.94	10.65	1.160	0.99975

THE EMPIRE DISTRICT ELECTRIC COMPANY
CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI
 6/1/2016 to 6/30/2016
 EXCLUDING MAJOR EVENT DAYS

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1050	5	4.27	584	33,767	1,596	0.366	57.82	21.16	1.032	0.99951
1051	2	3.16	12	1,718	1,067	0.011	143.17	1.61	1.000	0.99996
1052	2	1.92	165	10,215	1,162	0.142	61.91	8.79	1.000	0.99980
1082	7	10.11	7	607	1,328	0.005	86.71	0.46	1.000	0.99999
1091	3	5.99	3	359	715	0.004	119.67	0.50	1.000	0.99999
1092	3	5.70	238	13,124	970	0.245	55.14	13.53	1.097	0.99969
1093	2	2.79	29	2,638	239	0.121	90.97	11.04	1.000	0.99974
1094	3	5.15	13	1,379	1,234	0.011	106.08	1.12	1.083	0.99997
1101	2	6.31	212	40,313	978	0.217	190.16	41.22	2.000	0.99905
1102	4	4.64	6	413	465	0.013	68.83	0.89	1.200	0.99998
1141	3	3.84	905	99,901	902	1.003	110.39	110.75	4.289	0.99744
1211	7	11.93	179	14,123	1,482	0.121	78.90	9.53	1.011	0.99978
1232	1	2.10	46	5,791	1,180	0.039	125.89	4.91	1.000	0.99989
1233	1	1.55	1	93	640	0.002	93.00	0.15	1.000	0.99999
1241	5	10.40	881	57,257	852	1.034	64.99	67.20	1.051	0.99844
1242	1	2.02	8	975	680	0.012	121.88	1.43	1.000	0.99997
1243	5	7.83	17	1,337	1,198	0.014	78.65	1.12	1.000	0.99997

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1263	3	4.30	64	5,728	1,135	0.056	89.50	5.05	1.000	0.99988
1271	7	6.48	1,962	84,332	960	2.044	42.98	87.85	2.033	0.99797
1272	1	0.30	14	255	14	1.000	18.21	18.21	1.000	0.99958
1273	2	3.05	937	36,677	865	1.083	39.14	42.40	1.083	0.99902
1274	1	0.30	4	75	4	1.000	18.75	18.75	1.000	0.99957
1282	1	1.23	93	6,930	1,035	0.090	74.52	6.70	1.000	0.99985
1285	2	2.58	1,143	46,417	1,090	1.049	40.61	42.58	1.049	0.99901
1311	2	1.36	2	82	272	0.007	41.00	0.30	1.000	0.99999
1312	4	2.52	49	2,424	934	0.052	49.47	2.60	1.043	0.99994
1452	1	0.82	19	948	450	0.042	49.89	2.11	1.000	0.99995
1453	2	2.43	9	434	1,789	0.005	48.22	0.24	1.000	0.99999
1454	3	6.18	203	17,024	935	0.217	83.86	18.21	1.000	0.99958
1521	2	1.57	2	94	360	0.006	47.00	0.26	2.000	0.99999
1522	1	0.75	4	183	102	0.039	45.75	1.79	1.000	0.99996
1523	1	0.98	1	59	722	0.001	59.00	0.08	1.000	0.99999
1841	1	4.08	1	245	648	0.002	245.00	0.38	1.000	0.99999
1843	1	0.43	1	26	1,086	0.001	26.00	0.02	1.000	0.99999
2051	1	0.58	1	35	162	0.006	35.00	0.22	1.000	0.99999
2091	6	10.97	146	29,951	879	0.166	205.14	34.07	1.074	0.99921
2092	2	3.55	28	2,031	916	0.031	72.54	2.22	1.000	0.99995
2171	3	3.20	3	192	691	0.004	64.00	0.28	1.000	0.99999
2211	1	1.18	77	5,468	722	0.107	71.01	7.57	1.000	0.99982

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
2212	2	1.96	2	118	1,294	0.002	59.00	0.09	1.000	0.99999
2511	1	1.08	620	40,403	619	1.002	65.17	65.27	1.000	0.99849
2621	1	1.15	54	3,767	1,168	0.046	69.76	3.23	1.000	0.99993
2622	1	1.65	7	695	113	0.062	99.29	6.15	1.000	0.99986
2951	2	2.45	37	1,522	1,388	0.027	41.14	1.10	1.000	0.99997
2961	1	1.35	23	1,871	648	0.035	81.35	2.89	1.000	0.99993
3122	4	5.71	45	1,954	848	0.053	43.42	2.30	1.023	0.99995
3123	1	0.45	1	27	701	0.001	27.00	0.04	1.000	0.99999
3181	1	1.10	1	66	724	0.001	66.00	0.09	1.000	0.99999
3221	3	8.18	10	1,169	1,240	0.008	116.90	0.94	1.111	0.99998
3222	1	1.50	1	90	770	0.001	90.00	0.12	1.000	0.99999
3231	2	2.07	5	301	413	0.012	60.20	0.73	1.000	0.99998
3303	1	3.37	10	2,027	979	0.010	202.70	2.07	1.000	0.99995
3313	3	3.79	3	227	1,327	0.002	75.67	0.17	1.000	0.99999
3315	2	1.18	53	1,869	1,577	0.034	35.26	1.19	1.019	0.99997
3422	1	1.57	2	188	972	0.002	94.00	0.19	1.000	0.99999
3423	1	0.72	1	43	386	0.003	43.00	0.11	1.000	0.99999
3471	3	1.55	3	93	170	0.018	31.00	0.55	3.000	0.99999
3472	6	4.05	6	243	1,579	0.004	40.50	0.15	1.000	0.99999
3552	3	2.45	34	1,477	568	0.060	43.44	2.60	1.000	0.99994
3591	3	3.54	18	675	1,204	0.015	37.50	0.56	1.000	0.99999
3592	8	16.81	32	2,789	1,740	0.018	87.16	1.60	1.000	0.99996

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3593	3	14.03	40	11,929	929	0.043	298.23	12.84	1.000	0.99970
3594	1	1.15	11	766	680	0.016	69.64	1.13	1.000	0.99997
3621	3	3.95	1,585	152,960	1,560	1.016	96.50	98.05	1.017	0.99773
3661	4	3.97	63	4,153	1,028	0.061	65.92	4.04	1.033	0.99991
3662	6	5.02	42	2,285	778	0.054	54.40	2.94	1.000	0.99993
3663	3	4.11	146	11,282	794	0.184	77.27	14.21	1.074	0.99967
3664	8	11.15	89	9,612	517	0.172	108.00	18.59	1.000	0.99957
3675	1	0.78	64	3,024	415	0.154	47.25	7.29	1.000	0.99983
3692	1	1.07	1	64	410	0.002	64.00	0.16	1.000	0.99999
3694	1	0.77	45	2,108	1,328	0.034	46.84	1.59	1.000	0.99996
3701	2	2.83	485	38,880	485	1.000	80.16	80.16	1.336	0.99814
3702	1	2.10	14	1,764	610	0.023	126.00	2.89	1.000	0.99993
3751	3	3.64	56	4,876	885	0.063	87.07	5.51	1.000	0.99987
3871	2	2.00	52	3,933	1,386	0.038	75.63	2.84	1.020	0.99993
3872	1	1.38	13	1,091	1,067	0.012	83.92	1.02	1.000	0.99998
3878	2	2.58	20	1,432	1,136	0.018	71.60	1.26	1.000	0.99997
3891	5	3.95	35	2,162	452	0.077	61.77	4.78	1.029	0.99989
3893	5	13.75	24	5,011	1,110	0.022	208.79	4.51	1.043	0.99990
3901	7	63.47	37	29,248	879	0.042	790.49	33.27	1.947	0.99923
3903	1	1.42	28	2,406	298	0.094	85.93	8.07	1.000	0.99981
3912	2	2.22	2	133	1,141	0.002	66.50	0.12	1.000	0.99999
3913	1	1.35	112	9,144	810	0.138	81.64	11.29	1.000	0.99974

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3914	2	2.11	12	514	373	0.032	42.83	1.38	1.000	0.99997
3951	10	17.23	253	37,604	926	0.273	148.63	40.61	1.059	0.99906
3952	6	9.60	12	2,131	1,264	0.009	177.58	1.69	1.000	0.99996
3953	6	18.84	531	77,273	523	1.015	145.52	147.75	1.019	0.99658
3971	2	2.04	18	907	665	0.027	50.39	1.36	1.059	0.99997
3981	3	6.86	14	1,318	1,503	0.009	94.14	0.88	1.000	0.99998
3982	3	1.75	45	2,092	1,768	0.025	46.49	1.18	1.000	0.99997
3991	7	4.47	10	338	726	0.014	33.80	0.47	1.250	0.99999
4031	4	6.55	109	17,437	696	0.157	159.97	25.05	1.028	0.99942
4091	3	3.55	36	3,316	1,148	0.031	92.11	2.89	1.000	0.99993
4092	3	4.48	435	32,237	434	1.002	74.11	74.28	1.005	0.99828
4101	2	2.85	18	1,425	586	0.031	79.17	2.43	1.059	0.99994
4102	1	1.87	17	1,915	902	0.019	112.65	2.12	1.000	0.99995
4133	2	2.32	649	45,496	640	1.014	70.10	71.09	1.014	0.99835
4137	3	6.32	40	5,898	794	0.050	147.45	7.43	1.026	0.99983
4138	2	2.21	59	3,144	742	0.080	53.29	4.24	1.000	0.99990
4151	3	9.18	34	3,933	1,242	0.027	115.68	3.17	1.030	0.99993
4152	1	0.92	7	391	818	0.009	55.86	0.48	1.000	0.99999
4153	3	5.56	16	1,257	1,297	0.012	78.56	0.97	1.000	0.99998
4155	11	21.71	564	128,029	2,116	0.267	227.00	60.51	1.819	0.99860
4171	3	1.24	16	622	677	0.024	38.88	0.92	1.067	0.99998
4172	10	15.01	173	12,722	1,724	0.100	73.54	7.38	1.012	0.99983

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4182	1	1.37	1	82	1,022	0.001	82.00	0.08	1.000	0.99999
4211	4	3.35	72	3,600	706	0.102	50.00	5.10	1.000	0.99988
4212	3	4.37	817	88,201	815	1.002	107.96	108.22	1.002	0.99749
4222	6	6.25	49	4,561	1,044	0.047	93.08	4.37	1.065	0.99990
4224	1	1.33	1	80	755	0.001	80.00	0.11	1.000	0.99999
4303	3	6.65	8	1,058	976	0.008	132.25	1.08	1.000	0.99997
4311	1	0.67	791	31,640	791	1.000	40.00	40.00	1.000	0.99907
4312	1	0.92	841	46,829	842	0.999	55.68	55.62	1.000	0.99871
4313	1	0.58	319	11,436	320	0.997	35.85	35.74	1.000	0.99917
4324	5	3.09	159	3,710	1,252	0.127	23.33	2.96	1.006	0.99993
4331	1	1.58	5	477	304	0.016	95.40	1.57	1.000	0.99996
4341	10	20.01	75	7,290	1,782	0.042	97.20	4.09	1.000	0.99991
4342	19	29.29	107	9,445	1,750	0.061	88.27	5.40	1.115	0.99988
4343	9	20.02	1,121	115,814	1,024	1.095	103.31	113.10	1.095	0.99738
4361	1	0.53	28	912	796	0.035	32.57	1.15	1.000	0.99997
4362	3	8.73	3	524	828	0.004	174.67	0.63	1.000	0.99999
4363	7	11.12	83	4,393	1,660	0.050	52.93	2.65	1.051	0.99994
4371	9	9.94	61	4,829	1,543	0.040	79.16	3.13	1.070	0.99993
4372	5	4.71	5	283	440	0.011	56.60	0.64	1.000	0.99999
4373	5	5.37	10	643	776	0.013	64.30	0.83	1.111	0.99998
4383	1	1.43	1	86	146	0.007	86.00	0.59	1.000	0.99999
4385	1	2.25	5	675	1,115	0.004	135.00	0.61	1.000	0.99999

HIGHLY CONFIDENTIAL

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4431	5	10.14	11	1,596	1,386	0.008	145.09	1.15	1.000	0.99997
4432	1	1.07	1	64	462	0.002	64.00	0.14	1.000	0.99999
4511	2	2.00	57	2,921	1,131	0.050	51.25	2.58	1.000	0.99994
4602	4	4.20	248	19,208	948	0.262	77.45	20.26	1.908	0.99953
4692	1	0.95	28	1,618	470	0.060	57.79	3.44	1.000	0.99992
4714	2	3.08	16	1,347	328	0.049	84.19	4.11	1.067	0.99990
5601	3	2.47	117	5,720	1,164	0.101	48.89	4.91	1.000	0.99989
5603	6	4.86	1,581	93,107	1,288	1.227	58.89	72.29	1.227	0.99833
5902	3	5.28	26	4,128	1,006	0.026	158.77	4.10	1.000	0.99991
5904	3	7.14	10	2,410	1,223	0.008	241.00	1.97	1.000	0.99995
5905	4	5.31	119	6,212	1,874	0.064	52.20	3.31	1.000	0.99992
6021	1	0.77	8	371	1,270	0.006	46.38	0.29	1.000	0.99999
6141	1	1.05	20	1,276	635	0.031	63.80	2.01	1.000	0.99995
6142	5	9.10	79	14,869	308	0.256	188.22	48.28	1.681	0.99888
NUMBER OF OUTAGES		OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUSTOMERS SERVED	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
Total:	446	710.57	21,952	1,754,911	164,819	0.133	79.94	10.65	1.160	0.99975

THE EMPIRE DISTRICT ELECTRIC COMPANY
CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI
 7/1/2016 to 7/31/2016
 INCLUDING MAJOR EVENT DAYS

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1050	9	21.00	396	37,370	1,597	0.248	94.37	23.40	1.042	0.99948
1051	3	7.11	37	4,359	1,067	0.035	117.81	4.09	1.028	0.99991
1052	2	7.33	13	1,530	1,162	0.011	117.69	1.32	1.000	0.99997
1081	2	4.22	2	253	19	0.105	126.50	13.32	1.000	0.99970
1082	5	5.60	11	808	1,328	0.008	73.45	0.61	1.100	0.99999
1091	7	31.76	725	121,545	716	1.013	167.65	169.76	1.015	0.99620
1092	11	18.37	162	8,987	970	0.167	55.48	9.26	1.059	0.99979
1093	3	26.72	87	48,403	239	0.364	556.36	202.52	1.000	0.99546
1094	6	17.23	154	17,163	1,234	0.125	111.45	13.91	1.034	0.99969
1101	2	3.73	127	10,337	978	0.130	81.39	10.57	1.000	0.99976
1102	2	6.51	4	918	465	0.009	229.50	1.97	1.333	0.99996
1141	2	4.90	75	9,951	902	0.083	132.68	11.03	1.087	0.99975
1211	3	5.01	22	1,688	1,480	0.015	76.73	1.14	1.000	0.99997
1232	6	15.31	323	107,758	1,180	0.274	333.62	91.32	1.095	0.99795
1233	3	4.58	3	275	640	0.005	91.67	0.43	1.000	0.99999
1241	2	2.78	10	711	853	0.012	71.10	0.83	1.000	0.99998
1242	6	6.37	824	27,513	680	1.212	33.39	40.46	1.226	0.99909

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1243	1	0.65	8	313	1,199	0.007	39.13	0.26	1.000	0.99999
1263	7	26.72	157	49,566	1,134	0.138	315.71	43.71	1.236	0.99902
1271	7	20.22	11	1,777	961	0.011	161.55	1.85	1.000	0.99996
1273	2	4.38	73	14,484	865	0.084	198.41	16.74	1.000	0.99962
1282	3	14.20	60	22,331	1,035	0.058	372.18	21.58	1.000	0.99952
1284	3	6.86	1,041	93,999	942	1.105	90.30	99.79	1.105	0.99776
1312	3	3.69	12	710	934	0.013	59.17	0.76	1.000	0.99998
1451	2	8.12	79	29,694	522	0.151	375.87	56.89	1.000	0.99873
1452	1	4.05	20	4,872	449	0.045	243.60	10.85	1.000	0.99976
1453	4	4.93	76	4,346	1,792	0.042	57.18	2.43	1.000	0.99995
1454	3	3.58	3	215	935	0.003	71.67	0.23	1.000	0.99999
1455	2	16.12	2	967	389	0.005	483.50	2.49	1.000	0.99994
1521	3	4.68	3	281	361	0.008	93.67	0.78	1.000	0.99998
1523	2	2.65	2	159	723	0.003	79.50	0.22	1.000	0.99999
1841	2	3.75	2	225	649	0.003	112.50	0.35	1.000	0.99999
1843	1	1.53	1	92	1,086	0.001	92.00	0.08	1.000	0.99999
2051	1	1.82	1	109	163	0.006	109.00	0.67	1.000	0.99999
2091	3	7.12	127	18,379	879	0.144	144.72	20.91	1.041	0.99953
2092	6	11.84	416	43,281	917	0.454	104.04	47.20	1.067	0.99894
2171	2	4.22	8	1,408	563	0.014	176.00	2.50	1.143	0.99994
2211	3	6.50	20	1,110	723	0.028	55.50	1.54	1.000	0.99997
2212	5	4.55	66	3,691	1,295	0.051	55.92	2.85	1.048	0.99994

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
2511	1	1.32	1	79	618	0.002	79.00	0.13	1.000	0.99999
2621	3	2.73	56	6,538	1,168	0.048	116.75	5.60	1.018	0.99987
2622	1	1.28	1	77	113	0.009	77.00	0.68	1.000	0.99998
2921	4	7.75	152	18,241	375	0.405	120.01	48.64	1.056	0.99891
2951	5	14.46	62	7,239	1,391	0.045	116.76	5.20	1.033	0.99988
2952	3	5.02	50	4,386	155	0.323	87.72	28.30	1.020	0.99937
3041	1	0.50	1	30	80	0.013	30.00	0.38	1.000	0.99999
3081	3	4.90	14	1,165	573	0.024	83.21	2.03	1.077	0.99995
3082	2	6.97	4	569	322	0.012	142.25	1.77	1.000	0.99996
3121	1	0.52	1	31	1,131	0.001	31.00	0.03	1.000	0.99999
3181	1	1.68	37	3,694	724	0.051	99.84	5.10	1.000	0.99989
3222	1	2.03	8	978	771	0.010	122.25	1.27	1.000	0.99997
3232	1	1.42	13	1,106	431	0.030	85.08	2.57	1.000	0.99994
3301	1	1.12	196	13,210	196	1.000	67.40	67.40	1.000	0.99849
3303	2	5.98	2	359	979	0.002	179.50	0.37	1.000	0.99999
3311	1	0.93	22	1,245	534	0.041	56.59	2.33	1.000	0.99995
3314	1	1.20	9	648	222	0.041	72.00	2.92	1.000	0.99993
3315	1	4.48	14	3,778	1,578	0.009	269.86	2.39	1.000	0.99995
3422	3	5.54	33	2,542	972	0.034	77.03	2.62	1.031	0.99994
3472	1	1.02	1	61	1,579	0.001	61.00	0.04	1.000	0.99999
3553	2	2.80	2	168	1,039	0.002	84.00	0.16	1.000	0.99999
3591	4	7.89	1,262	193,052	1,206	1.046	152.97	160.08	1.053	0.99641

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3592	4	5.22	1,754	213,899	1,738	1.009	121.95	123.07	1.006	0.99724
3593	2	5.03	968	153,279	929	1.042	158.35	164.99	1.042	0.99630
3594	3	8.03	679	106,062	680	0.999	156.20	155.97	1.033	0.99651
3621	1	0.65	36	1,406	1,560	0.023	39.06	0.90	1.000	0.99998
3661	4	16.35	15	1,434	1,028	0.015	95.60	1.39	1.000	0.99997
3662	3	9.93	9	3,156	778	0.012	350.67	4.06	1.125	0.99991
3663	3	6.45	21	4,924	795	0.026	234.48	6.19	1.000	0.99986
3664	4	5.25	54	2,240	517	0.104	41.48	4.33	1.688	0.99990
3675	1	1.08	415	27,161	415	1.000	65.45	65.45	1.000	0.99853
3691	1	2.20	20	2,648	1,163	0.017	132.40	2.28	1.000	0.99995
3692	1	2.37	1	142	410	0.002	142.00	0.35	1.000	0.99999
3694	3	3.60	67	2,941	1,328	0.050	43.90	2.21	1.000	0.99995
3701	3	5.82	242	52,452	485	0.499	216.74	108.15	1.008	0.99758
3702	2	2.59	16	897	611	0.026	56.06	1.47	1.067	0.99997
3751	1	1.60	1	96	885	0.001	96.00	0.11	1.000	0.99999
3871	2	1.09	18	719	1,388	0.013	39.94	0.52	1.000	0.99999
3872	2	4.70	46	6,501	1,067	0.043	141.33	6.09	2.000	0.99986
3878	2	2.10	26	1,893	1,138	0.023	72.81	1.66	1.000	0.99996
3891	2	4.90	511	110,165	452	1.131	215.59	243.73	1.131	0.99454
3893	10	30.36	17	3,180	1,111	0.015	187.06	2.86	1.000	0.99994
3901	2	3.72	879	145,819	880	0.999	165.89	165.70	1.001	0.99629
3902	1	2.65	86	13,709	87	0.989	159.41	157.57	1.000	0.99647

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3903	4	6.64	359	54,112	298	1.205	150.73	181.58	1.205	0.99593
3912	3	2.45	1,112	84,542	1,142	0.974	76.03	74.03	1.002	0.99834
3913	2	6.49	156	38,730	809	0.193	248.27	47.87	1.054	0.99893
3914	2	3.25	98	9,630	373	0.263	98.27	25.82	2.000	0.99942
3951	4	9.10	294	21,140	927	0.317	71.90	22.80	1.039	0.99949
3952	16	81.38	664	241,804	1,264	0.525	364.16	191.30	1.076	0.99571
3953	5	21.01	53	20,954	523	0.101	395.36	40.07	1.060	0.99910
3971	3	3.57	20	1,522	665	0.030	76.10	2.29	1.053	0.99995
3981	2	1.67	2	100	1,503	0.001	50.00	0.07	1.000	0.99999
3982	1	0.27	38	627	1,768	0.021	16.50	0.35	1.000	0.99999
3991	12	11.16	947	134,111	726	1.304	141.62	184.73	1.304	0.99586
3992	2	1.92	2	115	166	0.012	57.50	0.69	1.000	0.99998
403	1	6.02	7	2,527	267	0.026	361.00	9.46	1.000	0.99979
4031	7	28.40	72	39,469	696	0.103	548.18	56.71	1.075	0.99873
4091	3	4.07	1,149	128,596	1,148	1.001	111.92	112.02	1.002	0.99749
4101	2	2.04	91	5,131	589	0.154	56.38	8.71	1.022	0.99980
4102	4	6.20	53	7,757	903	0.059	146.36	8.59	1.039	0.99981
4132	1	1.50	2	180	565	0.004	90.00	0.32	1.000	0.99999
4133	2	2.47	62	4,684	640	0.097	75.55	7.32	1.000	0.99984
4137	3	4.85	17	1,615	794	0.021	95.00	2.03	1.000	0.99995
4138	2	3.55	39	3,636	742	0.053	93.23	4.90	1.000	0.99989
4141	1	2.07	1	124	82	0.012	124.00	1.51	1.000	0.99997

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4142	1	0.72	12	526	597	0.020	43.83	0.88	1.000	0.99998
4151	5	5.29	95	2,051	1,243	0.076	21.59	1.65	1.044	0.99996
4153	1	1.28	1	77	1,284	0.001	77.00	0.06	1.000	0.99999
4155	1	0.27	20	336	2,133	0.009	16.80	0.16	1.000	0.99999
4171	5	8.93	137	19,411	677	0.202	141.69	28.67	1.046	0.99936
4172	6	30.55	123	13,946	1,724	0.071	113.38	8.09	1.008	0.99982
4173	3	9.25	32	4,897	633	0.051	153.03	7.74	1.067	0.99983
4181	3	2.56	495	18,850	492	1.006	38.08	38.31	1.004	0.99914
4182	1	2.43	1	146	1,023	0.001	146.00	0.14	1.000	0.99999
4211	4	19.39	167	13,591	707	0.236	81.38	19.22	1.000	0.99957
4212	2	3.57	2	214	815	0.002	107.00	0.26	1.000	0.99999
4222	4	18.79	25	6,181	1,044	0.024	247.24	5.92	1.000	0.99987
4223	3	3.56	167	11,776	825	0.202	70.51	14.27	1.988	0.99968
4224	2	4.75	2	285	755	0.003	142.50	0.38	1.000	0.99999
4303	6	8.79	98	4,938	980	0.100	50.39	5.04	1.000	0.99989
4313	1	1.67	1	100	320	0.003	100.00	0.31	1.000	0.99999
4322	1	3.85	1	231	100	0.010	231.00	2.31	1.000	0.99995
4324	7	11.74	146	21,146	1,253	0.117	144.84	16.88	1.000	0.99962
4341	3	4.85	18	1,161	1,783	0.010	64.50	0.65	1.059	0.99999
4342	5	4.89	13	695	1,752	0.007	53.46	0.40	1.000	0.99999
4361	4	3.24	16	665	796	0.020	41.56	0.84	1.067	0.99998
4362	4	13.68	71	15,293	828	0.086	215.39	18.47	1.000	0.99959

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4363	8	41.88	40	5,942	1,663	0.024	148.55	3.57	1.111	0.99992
4371	4	4.25	32	1,785	1,543	0.021	55.78	1.16	1.032	0.99997
4373	10	17.57	783	95,217	776	1.009	121.61	122.70	1.038	0.99725
4385	3	4.91	1,157	111,541	1,121	1.032	96.41	99.50	1.049	0.99777
4431	9	16.16	23	1,729	1,386	0.017	75.17	1.25	1.000	0.99997
4432	5	6.91	90	5,747	463	0.194	63.86	12.41	1.034	0.99972
4475	1	0.77	1	46	15	0.067	46.00	3.07	1.000	0.99993
4476	1	1.35	32	2,597	32	1.000	81.16	81.16	1.000	0.99818
4511	1	1.63	1	98	1,132	0.001	98.00	0.09	1.000	0.99999
455	1	2.68	1	161	168	0.006	161.00	0.96	1.000	0.99998
4602	3	1.48	61	2,308	948	0.064	37.84	2.43	1.034	0.99995
4692	2	12.16	6	2,505	470	0.013	417.50	5.33	1.200	0.99988
5602	1	3.05	50	9,177	681	0.073	183.54	13.48	1.000	0.99970
5603	2	1.50	2	90	1,288	0.002	45.00	0.07	1.000	0.99999
5641	1	0.90	1	54	322	0.003	54.00	0.17	1.000	0.99999
5902	5	24.05	148	17,841	1,002	0.148	120.55	17.81	1.021	0.99960
5903	1	0.72	164	7,160	255	0.643	43.66	28.08	1.000	0.99937
5904	4	10.06	182	24,565	1,223	0.149	134.97	20.09	1.000	0.99955
5905	1	5.65	1	339	1,875	0.001	339.00	0.18	1.000	0.99999
6021	2	0.91	20	590	1,275	0.016	29.50	0.46	1.053	0.99999
6024	1	1.08	34	2,215	393	0.087	65.15	5.64	1.000	0.99987
6141	4	4.47	29	1,943	635	0.046	67.00	3.06	1.074	0.99993

HIGHLY CONFIDENTIAL

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
6142	1	1.37	1	82	308	0.003	82.00	0.27	1.000	0.99999
	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUSTOMERS SERVED	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
Total:	465	1,097.58	22,725	3,036,851	164,802	0.138	133.63	18.43	1.049	0.99959

THE EMPIRE DISTRICT ELECTRIC COMPANY
CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI

7/1/2016 to 7/31/2016

EXCLUDING MAJOR EVENT DAYS

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1050	9	21.00	396	37,370	1,597	0.248	94.37	23.40	1.042	0.99948
1051	3	7.11	37	4,359	1,067	0.035	117.81	4.09	1.028	0.99991
1052	2	7.33	13	1,530	1,162	0.011	117.69	1.32	1.000	0.99997
1081	2	4.22	2	253	19	0.105	126.50	13.32	1.000	0.99970
1082	5	5.60	11	808	1,328	0.008	73.45	0.61	1.100	0.99999
1091	7	31.76	725	121,545	716	1.013	167.65	169.76	1.015	0.99620
1092	11	18.37	162	8,987	970	0.167	55.48	9.26	1.059	0.99979
1093	3	26.72	87	48,403	239	0.364	556.36	202.52	1.000	0.99546
1094	6	17.23	154	17,163	1,234	0.125	111.45	13.91	1.034	0.99969
1101	2	3.73	127	10,337	978	0.130	81.39	10.57	1.000	0.99976
1102	2	6.51	4	918	465	0.009	229.50	1.97	1.333	0.99996
1141	2	4.90	75	9,951	902	0.083	132.68	11.03	1.087	0.99975
1211	3	5.01	22	1,688	1,480	0.015	76.73	1.14	1.000	0.99997
1232	6	15.31	323	107,758	1,180	0.274	333.62	91.32	1.095	0.99795
1233	3	4.58	3	275	640	0.005	91.67	0.43	1.000	0.99999
1241	2	2.78	10	711	853	0.012	71.10	0.83	1.000	0.99998
1242	6	6.37	824	27,513	680	1.212	33.39	40.46	1.226	0.99909

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1243	1	0.65	8	313	1,199	0.007	39.13	0.26	1.000	0.99999
1263	7	26.72	157	49,566	1,134	0.138	315.71	43.71	1.236	0.99902
1271	7	20.22	11	1,777	961	0.011	161.55	1.85	1.000	0.99996
1273	2	4.38	73	14,484	865	0.084	198.41	16.74	1.000	0.99962
1282	3	14.20	60	22,331	1,035	0.058	372.18	21.58	1.000	0.99952
1284	3	6.86	1,041	93,999	942	1.105	90.30	99.79	1.105	0.99776
1312	3	3.69	12	710	934	0.013	59.17	0.76	1.000	0.99998
1451	2	8.12	79	29,694	522	0.151	375.87	56.89	1.000	0.99873
1452	1	4.05	20	4,872	449	0.045	243.60	10.85	1.000	0.99976
1453	4	4.93	76	4,346	1,792	0.042	57.18	2.43	1.000	0.99995
1454	3	3.58	3	215	935	0.003	71.67	0.23	1.000	0.99999
1455	2	16.12	2	967	389	0.005	483.50	2.49	1.000	0.99994
1521	3	4.68	3	281	361	0.008	93.67	0.78	1.000	0.99998
1523	2	2.65	2	159	723	0.003	79.50	0.22	1.000	0.99999
1841	2	3.75	2	225	649	0.003	112.50	0.35	1.000	0.99999
1843	1	1.53	1	92	1,086	0.001	92.00	0.08	1.000	0.99999
2051	1	1.82	1	109	163	0.006	109.00	0.67	1.000	0.99999
2091	3	7.12	127	18,379	879	0.144	144.72	20.91	1.041	0.99953
2092	6	11.84	416	43,281	917	0.454	104.04	47.20	1.067	0.99894
2171	2	4.22	8	1,408	563	0.014	176.00	2.50	1.143	0.99994
2211	3	6.50	20	1,110	723	0.028	55.50	1.54	1.000	0.99997
2212	5	4.55	66	3,691	1,295	0.051	55.92	2.85	1.048	0.99994

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
2511	1	1.32	1	79	618	0.002	79.00	0.13	1.000	0.99999
2621	3	2.73	56	6,538	1,168	0.048	116.75	5.60	1.018	0.99987
2622	1	1.28	1	77	113	0.009	77.00	0.68	1.000	0.99998
2921	4	7.75	152	18,241	375	0.405	120.01	48.64	1.056	0.99891
2951	5	14.46	62	7,239	1,391	0.045	116.76	5.20	1.033	0.99988
2952	3	5.02	50	4,386	155	0.323	87.72	28.30	1.020	0.99937
3041	1	0.50	1	30	80	0.013	30.00	0.38	1.000	0.99999
3081	3	4.90	14	1,165	573	0.024	83.21	2.03	1.077	0.99995
3082	2	6.97	4	569	322	0.012	142.25	1.77	1.000	0.99996
3121	1	0.52	1	31	1,131	0.001	31.00	0.03	1.000	0.99999
3181	1	1.68	37	3,694	724	0.051	99.84	5.10	1.000	0.99989
3222	1	2.03	8	978	771	0.010	122.25	1.27	1.000	0.99997
3232	1	1.42	13	1,106	431	0.030	85.08	2.57	1.000	0.99994
3301	1	1.12	196	13,210	196	1.000	67.40	67.40	1.000	0.99849
3303	2	5.98	2	359	979	0.002	179.50	0.37	1.000	0.99999
3311	1	0.93	22	1,245	534	0.041	56.59	2.33	1.000	0.99995
3314	1	1.20	9	648	222	0.041	72.00	2.92	1.000	0.99993
3315	1	4.48	14	3,778	1,578	0.009	269.86	2.39	1.000	0.99995
3422	3	5.54	33	2,542	972	0.034	77.03	2.62	1.031	0.99994
3472	1	1.02	1	61	1,579	0.001	61.00	0.04	1.000	0.99999
3553	2	2.80	2	168	1,039	0.002	84.00	0.16	1.000	0.99999
3591	4	7.89	1,262	193,052	1,206	1.046	152.97	160.08	1.053	0.99641

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3592	4	5.22	1,754	213,899	1,738	1.009	121.95	123.07	1.006	0.99724
3593	2	5.03	968	153,279	929	1.042	158.35	164.99	1.042	0.99630
3594	3	8.03	679	106,062	680	0.999	156.20	155.97	1.033	0.99651
3621	1	0.65	36	1,406	1,560	0.023	39.06	0.90	1.000	0.99998
3661	4	16.35	15	1,434	1,028	0.015	95.60	1.39	1.000	0.99997
3662	3	9.93	9	3,156	778	0.012	350.67	4.06	1.125	0.99991
3663	3	6.45	21	4,924	795	0.026	234.48	6.19	1.000	0.99986
3664	4	5.25	54	2,240	517	0.104	41.48	4.33	1.688	0.99990
3675	1	1.08	415	27,161	415	1.000	65.45	65.45	1.000	0.99853
3691	1	2.20	20	2,648	1,163	0.017	132.40	2.28	1.000	0.99995
3692	1	2.37	1	142	410	0.002	142.00	0.35	1.000	0.99999
3694	3	3.60	67	2,941	1,328	0.050	43.90	2.21	1.000	0.99995
3701	3	5.82	242	52,452	485	0.499	216.74	108.15	1.008	0.99758
3702	2	2.59	16	897	611	0.026	56.06	1.47	1.067	0.99997
3751	1	1.60	1	96	885	0.001	96.00	0.11	1.000	0.99999
3871	2	1.09	18	719	1,388	0.013	39.94	0.52	1.000	0.99999
3872	2	4.70	46	6,501	1,067	0.043	141.33	6.09	2.000	0.99986
3878	2	2.10	26	1,893	1,138	0.023	72.81	1.66	1.000	0.99996
3891	2	4.90	511	110,165	452	1.131	215.59	243.73	1.131	0.99454
3893	10	30.36	17	3,180	1,111	0.015	187.06	2.86	1.000	0.99994
3901	2	3.72	879	145,819	880	0.999	165.89	165.70	1.001	0.99629
3902	1	2.65	86	13,709	87	0.989	159.41	157.57	1.000	0.99647

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3903	4	6.64	359	54,112	298	1.205	150.73	181.58	1.205	0.99593
3912	3	2.45	1,112	84,542	1,142	0.974	76.03	74.03	1.002	0.99834
3913	2	6.49	156	38,730	809	0.193	248.27	47.87	1.054	0.99893
3914	2	3.25	98	9,630	373	0.263	98.27	25.82	2.000	0.99942
3951	4	9.10	294	21,140	927	0.317	71.90	22.80	1.039	0.99949
3952	16	81.38	664	241,804	1,264	0.525	364.16	191.30	1.076	0.99571
3953	5	21.01	53	20,954	523	0.101	395.36	40.07	1.060	0.99910
3971	3	3.57	20	1,522	665	0.030	76.10	2.29	1.053	0.99995
3981	2	1.67	2	100	1,503	0.001	50.00	0.07	1.000	0.99999
3982	1	0.27	38	627	1,768	0.021	16.50	0.35	1.000	0.99999
3991	12	11.16	947	134,111	726	1.304	141.62	184.73	1.304	0.99586
3992	2	1.92	2	115	166	0.012	57.50	0.69	1.000	0.99998
403	1	6.02	7	2,527	267	0.026	361.00	9.46	1.000	0.99979
4031	7	28.40	72	39,469	696	0.103	548.18	56.71	1.075	0.99873
4091	3	4.07	1,149	128,596	1,148	1.001	111.92	112.02	1.002	0.99749
4101	2	2.04	91	5,131	589	0.154	56.38	8.71	1.022	0.99980
4102	4	6.20	53	7,757	903	0.059	146.36	8.59	1.039	0.99981
4132	1	1.50	2	180	565	0.004	90.00	0.32	1.000	0.99999
4133	2	2.47	62	4,684	640	0.097	75.55	7.32	1.000	0.99984
4137	3	4.85	17	1,615	794	0.021	95.00	2.03	1.000	0.99995
4138	2	3.55	39	3,636	742	0.053	93.23	4.90	1.000	0.99989
4141	1	2.07	1	124	82	0.012	124.00	1.51	1.000	0.99997

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4142	1	0.72	12	526	597	0.020	43.83	0.88	1.000	0.99998
4151	5	5.29	95	2,051	1,243	0.076	21.59	1.65	1.044	0.99996
4153	1	1.28	1	77	1,284	0.001	77.00	0.06	1.000	0.99999
4155	1	0.27	20	336	2,133	0.009	16.80	0.16	1.000	0.99999
4171	5	8.93	137	19,411	677	0.202	141.69	28.67	1.046	0.99936
4172	6	30.55	123	13,946	1,724	0.071	113.38	8.09	1.008	0.99982
4173	3	9.25	32	4,897	633	0.051	153.03	7.74	1.067	0.99983
4181	3	2.56	495	18,850	492	1.006	38.08	38.31	1.004	0.99914
4182	1	2.43	1	146	1,023	0.001	146.00	0.14	1.000	0.99999
4211	4	19.39	167	13,591	707	0.236	81.38	19.22	1.000	0.99957
4212	2	3.57	2	214	815	0.002	107.00	0.26	1.000	0.99999
4222	4	18.79	25	6,181	1,044	0.024	247.24	5.92	1.000	0.99987
4223	3	3.56	167	11,776	825	0.202	70.51	14.27	1.988	0.99968
4224	2	4.75	2	285	755	0.003	142.50	0.38	1.000	0.99999
4303	6	8.79	98	4,938	980	0.100	50.39	5.04	1.000	0.99989
4313	1	1.67	1	100	320	0.003	100.00	0.31	1.000	0.99999
4322	1	3.85	1	231	100	0.010	231.00	2.31	1.000	0.99995
4324	7	11.74	146	21,146	1,253	0.117	144.84	16.88	1.000	0.99962
4341	3	4.85	18	1,161	1,783	0.010	64.50	0.65	1.059	0.99999
4342	5	4.89	13	695	1,752	0.007	53.46	0.40	1.000	0.99999
4361	4	3.24	16	665	796	0.020	41.56	0.84	1.067	0.99998
4362	4	13.68	71	15,293	828	0.086	215.39	18.47	1.000	0.99959

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4363	8	41.88	40	5,942	1,663	0.024	148.55	3.57	1.111	0.99992
4371	4	4.25	32	1,785	1,543	0.021	55.78	1.16	1.032	0.99997
4373	10	17.57	783	95,217	776	1.009	121.61	122.70	1.038	0.99725
4385	3	4.91	1,157	111,541	1,121	1.032	96.41	99.50	1.049	0.99777
4431	9	16.16	23	1,729	1,386	0.017	75.17	1.25	1.000	0.99997
4432	5	6.91	90	5,747	463	0.194	63.86	12.41	1.034	0.99972
4475	1	0.77	1	46	15	0.067	46.00	3.07	1.000	0.99993
4476	1	1.35	32	2,597	32	1.000	81.16	81.16	1.000	0.99818
4511	1	1.63	1	98	1,132	0.001	98.00	0.09	1.000	0.99999
455	1	2.68	1	161	168	0.006	161.00	0.96	1.000	0.99998
4602	3	1.48	61	2,308	948	0.064	37.84	2.43	1.034	0.99995
4692	2	12.16	6	2,505	470	0.013	417.50	5.33	1.200	0.99988
5602	1	3.05	50	9,177	681	0.073	183.54	13.48	1.000	0.99970
5603	2	1.50	2	90	1,288	0.002	45.00	0.07	1.000	0.99999
5641	1	0.90	1	54	322	0.003	54.00	0.17	1.000	0.99999
5902	5	24.05	148	17,841	1,002	0.148	120.55	17.81	1.021	0.99960
5903	1	0.72	164	7,160	255	0.643	43.66	28.08	1.000	0.99937
5904	4	10.06	182	24,565	1,223	0.149	134.97	20.09	1.000	0.99955
5905	1	5.65	1	339	1,875	0.001	339.00	0.18	1.000	0.99999
6021	2	0.91	20	590	1,275	0.016	29.50	0.46	1.053	0.99999
6024	1	1.08	34	2,215	393	0.087	65.15	5.64	1.000	0.99987
6141	4	4.47	29	1,943	635	0.046	67.00	3.06	1.074	0.99993

HIGHLY CONFIDENTIAL

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
6142	1	1.37	1	82	308	0.003	82.00	0.27	1.000	0.99999
	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUSTOMERS SERVED	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
Total:	465	1,097.58	22,725	3,036,851	164,802	0.138	133.63	18.43	1.049	0.99959

THE EMPIRE DISTRICT ELECTRIC COMPANY
CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI
 8/1/2016 to 8/31/2016
 INCLUDING MAJOR EVENT DAYS

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1050	3	3.52	1,598	241,800	1,597	1.001	151.31	151.41	1.001	0.99661
1051	3	4.10	1,069	161,905	1,067	1.002	151.45	151.74	1.002	0.99660
1052	1	2.52	1,162	176,217	1,162	1.000	151.65	151.65	1.000	0.99660
1082	9	18.37	21	3,827	1,328	0.016	182.24	2.88	1.105	0.99994
1091	2	4.60	52	3,235	716	0.073	62.21	4.52	1.020	0.99990
1092	1	1.32	13	1,036	970	0.013	79.69	1.07	1.000	0.99998
1094	1	1.42	1	85	1,234	0.001	85.00	0.07	1.000	0.99999
1101	5	8.62	1,080	85,141	978	1.104	78.83	87.06	1.104	0.99805
1211	2	3.08	14	1,292	1,480	0.009	92.29	0.87	1.000	0.99998
1232	3	3.79	15	975	1,180	0.013	65.00	0.83	1.000	0.99998
1233	1	0.83	107	5,430	640	0.167	50.75	8.48	1.000	0.99981
1241	1	0.20	1	12	853	0.001	12.00	0.01	1.000	0.99999
1263	2	2.00	4	214	1,134	0.004	53.50	0.19	1.000	0.99999
1264	3	4.09	21	1,242	18	1.167	59.14	69.00	1.167	0.99845
1265	2	2.85	86	7,380	1,282	0.067	85.81	5.76	1.000	0.99987
1267	1	4.43	1	266	82	0.012	266.00	3.24	1.000	0.99993
1271	3	1.70	967	29,986	961	1.006	31.01	31.20	1.002	0.99930

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1273	5	1.68	43	906	865	0.050	21.07	1.05	1.000	0.99998
1281	3	0.42	3	25	167	0.018	8.33	0.15	1.000	0.99999
1282	3	4.29	3	257	1,035	0.003	85.67	0.25	1.000	0.99999
1284	1	0.88	1	53	942	0.001	53.00	0.06	1.000	0.99999
1312	2	2.35	7	598	934	0.007	85.43	0.64	1.000	0.99999
1452	4	8.17	4	490	449	0.009	122.50	1.09	1.000	0.99998
1453	2	3.29	9	395	1,792	0.005	43.89	0.22	1.000	0.99999
1454	1	1.13	165	11,281	935	0.176	68.37	12.07	1.000	0.99973
1455	4	5.38	31	1,798	389	0.080	58.00	4.62	1.107	0.99990
1523	5	6.69	11	804	723	0.015	73.09	1.11	1.000	0.99998
1841	1	1.75	650	68,401	649	1.002	105.23	105.39	1.000	0.99764
1843	3	3.38	5	263	1,086	0.005	52.60	0.24	1.000	0.99999
2091	1	1.42	8	684	879	0.009	85.50	0.78	1.000	0.99998
2171	1	0.90	1	54	563	0.002	54.00	0.10	1.000	0.99999
2211	1	3.42	1	205	723	0.001	205.00	0.28	1.000	0.99999
2492	1	2.05	1	123	29	0.034	123.00	4.24	1.000	0.99990
2621	4	7.70	37	3,724	1,168	0.032	100.65	3.19	1.000	0.99993
2921	1	1.35	15	1,223	375	0.040	81.53	3.26	1.000	0.99993
2962	1	0.28	1	17	257	0.004	17.00	0.07	1.000	0.99999
3121	2	3.62	2	217	1,131	0.002	108.50	0.19	1.000	0.99999
3122	4	4.33	80	8,080	849	0.094	101.00	9.52	1.067	0.99979
3123	1	0.42	14	356	702	0.020	25.43	0.51	1.000	0.99999

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3221	3	2.83	67	2,897	1,241	0.054	43.24	2.33	1.015	0.99995
3232	4	5.10	32	2,186	431	0.074	68.31	5.07	1.032	0.99989
3302	1	1.88	7	791	900	0.008	113.00	0.88	1.000	0.99998
3303	1	1.67	17	1,713	979	0.017	100.76	1.75	1.000	0.99996
3311	2	2.51	177	14,212	534	0.331	80.29	26.61	1.000	0.99940
3315	1	1.67	1	100	1,578	0.001	100.00	0.06	1.000	0.99999
3422	1	2.30	1	138	972	0.001	138.00	0.14	1.000	0.99999
3423	1	1.50	1	90	386	0.003	90.00	0.23	1.000	0.99999
3472	1	0.37	1	22	1,579	0.001	22.00	0.01	1.000	0.99999
3552	2	7.30	18	3,957	569	0.032	219.83	6.95	1.059	0.99984
3591	1	0.87	30	1,573	1,206	0.025	52.43	1.30	1.000	0.99997
3592	3	3.74	27	1,961	1,738	0.016	72.63	1.13	1.000	0.99997
3594	3	8.91	3	535	680	0.004	178.33	0.79	1.000	0.99998
3662	2	1.82	14	655	778	0.018	46.79	0.84	1.077	0.99998
3663	2	0.75	127	1,370	795	0.160	10.79	1.72	1.000	0.99996
3664	2	1.55	6	261	517	0.012	43.50	0.50	1.000	0.99999
3673	1	0.78	16	753	267	0.060	47.06	2.82	1.000	0.99994
3691	1	1.12	1	67	1,163	0.001	67.00	0.06	1.000	0.99999
3692	1	1.23	1	74	410	0.002	74.00	0.18	1.000	0.99999
3694	3	1.40	1,336	34,405	1,328	1.006	25.75	25.91	1.007	0.99942
3701	2	2.25	18	1,559	485	0.037	86.61	3.21	1.000	0.99993
3702	2	1.65	9	496	611	0.015	55.11	0.81	1.125	0.99998

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3751	2	1.05	32	373	885	0.036	11.66	0.42	1.000	0.99999
3872	1	1.63	1	98	1,067	0.001	98.00	0.09	1.000	0.99999
3893	1	0.57	1	34	1,111	0.001	34.00	0.03	1.000	0.99999
3894	1	1.17	116	8,120	116	1.000	70.00	70.00	1.000	0.99843
3901	1	1.28	15	1,159	880	0.017	77.27	1.32	1.000	0.99997
3912	1	2.00	1	120	1,142	0.001	120.00	0.11	1.000	0.99999
3913	1	0.62	49	1,832	809	0.061	37.39	2.26	1.000	0.99995
3914	1	1.33	24	1,927	373	0.064	80.29	5.17	1.000	0.99988
3951	2	6.18	926	244,031	927	0.999	263.53	263.25	1.001	0.99410
3952	2	1.65	80	3,513	1,264	0.063	43.91	2.78	1.000	0.99994
3953	4	6.94	4	416	523	0.008	104.00	0.80	1.000	0.99998
3981	5	4.77	31	2,209	1,503	0.021	71.26	1.47	1.000	0.99997
3982	1	1.05	70	4,405	1,768	0.040	62.93	2.49	1.000	0.99994
3991	6	6.48	28	1,755	726	0.039	62.68	2.42	1.037	0.99995
3992	1	0.75	1	45	166	0.006	45.00	0.27	1.000	0.99999
402	1	0.15	106	954	107	0.991	9.00	8.92	1.000	0.99980
4031	3	4.03	53	5,775	696	0.076	108.96	8.30	1.060	0.99981
405	1	1.40	53	4,468	53	1.000	84.30	84.30	1.000	0.99811
407	1	0.20	103	1,277	103	1.000	12.40	12.40	1.000	0.99972
4091	1	1.23	1,147	85,451	1,148	0.999	74.50	74.43	1.000	0.99833
4092	4	5.58	436	31,252	434	1.005	71.68	72.01	1.007	0.99839
4101	2	6.29	234	32,146	589	0.397	137.38	54.58	1.004	0.99878

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4102	1	2.55	5	765	903	0.006	153.00	0.85	1.000	0.99998
4137	2	4.75	2	285	794	0.003	142.50	0.36	1.000	0.99999
4141	1	1.73	1	104	82	0.012	104.00	1.27	1.000	0.99997
4142	1	0.88	1	53	597	0.002	53.00	0.09	1.000	0.99999
4151	1	1.03	1,241	77,004	1,243	0.998	62.05	61.95	1.000	0.99861
4152	1	1.03	816	51,095	819	0.996	62.62	62.39	1.000	0.99860
4153	3	4.73	49	3,342	1,284	0.038	68.20	2.60	1.000	0.99994
4154	2	1.97	1,236	74,884	1,209	1.022	60.59	61.94	1.026	0.99861
4155	2	2.05	67	4,071	2,133	0.031	60.76	1.91	1.000	0.99996
4171	2	2.63	1,157	99,982	2,274	0.508	86.41	43.96	1.009	0.99669
4172	2	2.23	1,781	152,608	1,724	1.033	85.69	88.52	1.033	0.99802
4173	3	2.82	646	56,526	633	1.021	87.50	89.30	1.021	0.99800
4211	1	1.20	4	291	707	0.006	72.75	0.41	1.000	0.99999
4301	1	1.00	29	1,759	102	0.284	60.66	17.25	1.000	0.99961
4302	2	3.80	3	359	650	0.005	119.67	0.55	1.000	0.99999
4303	3	6.19	70	6,685	980	0.071	95.50	6.82	1.014	0.99985
4313	1	0.90	1	54	320	0.003	54.00	0.17	1.000	0.99999
4324	2	3.20	21	3,057	1,253	0.017	145.57	2.44	1.000	0.99995
4341	3	2.32	44	1,968	1,783	0.025	44.73	1.10	1.023	0.99998
4342	6	8.69	95	11,358	1,752	0.054	119.56	6.48	1.080	0.99985
4343	1	1.47	6	529	1,024	0.006	88.17	0.52	1.000	0.99999
4362	2	4.62	2	277	828	0.002	138.50	0.33	1.000	0.99999

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4363	2	4.17	2	250	1,663	0.001	125.00	0.15	1.000	0.99999
4371	2	3.89	78	3,957	1,543	0.051	50.73	2.56	1.013	0.99994
4372	3	3.25	14	856	440	0.032	61.14	1.95	1.000	0.99996
4373	1	1.70	776	79,152	776	1.000	102.00	102.00	1.000	0.99772
4386	1	3.05	228	41,724	1,653	0.138	183.00	25.24	1.000	0.99943
4431	6	4.96	31	2,841	1,386	0.022	91.65	2.05	1.000	0.99995
4432	1	1.40	62	5,219	463	0.134	84.18	11.27	1.000	0.99975
4511	2	7.67	28	7,925	1,132	0.025	283.04	7.00	1.000	0.99984
4512	1	3.47	1	208	1,013	0.001	208.00	0.21	1.000	0.99999
455	1	4.22	1	253	168	0.006	253.00	1.51	1.000	0.99997
4601	1	0.73	259	11,490	415	0.624	44.36	27.69	1.000	0.99938
4692	1	1.12	3	201	470	0.006	67.00	0.43	1.000	0.99999
4714	2	4.52	134	22,836	328	0.409	170.42	69.62	1.126	0.99844
5601	4	2.40	85	2,277	1,164	0.073	26.79	1.96	1.000	0.99996
5603	1	1.73	53	5,534	1,288	0.041	104.42	4.30	1.000	0.99990
5902	2	1.60	66	3,730	1,002	0.066	56.52	3.72	1.000	0.99992
5903	2	1.38	36	1,505	255	0.141	41.81	5.90	1.000	0.99987
5904	4	8.08	29	5,934	1,223	0.024	204.62	4.85	1.000	0.99989
5905	2	3.23	2	194	1,875	0.001	97.00	0.10	1.000	0.99999
6021	1	0.65	14	558	1,275	0.011	39.86	0.44	1.000	0.99999
6141	1	1.62	20	1,940	635	0.031	97.00	3.06	1.000	0.99993
6143	1	1.77	1	106	372	0.003	106.00	0.28	1.000	0.99999

HIGHLY CONFIDENTIAL

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUSTOMERS SERVED	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
Total:	262	370.29	21,925	2,066,918	164,802	0.133	94.27	12.54	1.011	0.99972

THE EMPIRE DISTRICT ELECTRIC COMPANY
CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI
 8/1/2016 to 8/31/2016
 EXCLUDING MAJOR EVENT DAYS

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1050	3	3.52	1,598	241,800	1,597	1.001	151.31	151.41	1.001	0.99661
1051	3	4.10	1,069	161,905	1,067	1.002	151.45	151.74	1.002	0.99660
1052	1	2.52	1,162	176,217	1,162	1.000	151.65	151.65	1.000	0.99660
1082	9	18.37	21	3,827	1,328	0.016	182.24	2.88	1.105	0.99994
1091	2	4.60	52	3,235	716	0.073	62.21	4.52	1.020	0.99990
1092	1	1.32	13	1,036	970	0.013	79.69	1.07	1.000	0.99998
1094	1	1.42	1	85	1,234	0.001	85.00	0.07	1.000	0.99999
1101	5	8.62	1,080	85,141	978	1.104	78.83	87.06	1.104	0.99805
1211	2	3.08	14	1,292	1,480	0.009	92.29	0.87	1.000	0.99998
1232	3	3.79	15	975	1,180	0.013	65.00	0.83	1.000	0.99998
1233	1	0.83	107	5,430	640	0.167	50.75	8.48	1.000	0.99981
1241	1	0.20	1	12	853	0.001	12.00	0.01	1.000	0.99999
1263	2	2.00	4	214	1,134	0.004	53.50	0.19	1.000	0.99999
1264	3	4.09	21	1,242	18	1.167	59.14	69.00	1.167	0.99845
1265	2	2.85	86	7,380	1,282	0.067	85.81	5.76	1.000	0.99987
1267	1	4.43	1	266	82	0.012	266.00	3.24	1.000	0.99993
1271	3	1.70	967	29,986	961	1.006	31.01	31.20	1.002	0.99930

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1273	5	1.68	43	906	865	0.050	21.07	1.05	1.000	0.99998
1281	3	0.42	3	25	167	0.018	8.33	0.15	1.000	0.99999
1282	3	4.29	3	257	1,035	0.003	85.67	0.25	1.000	0.99999
1284	1	0.88	1	53	942	0.001	53.00	0.06	1.000	0.99999
1312	2	2.35	7	598	934	0.007	85.43	0.64	1.000	0.99999
1452	4	8.17	4	490	449	0.009	122.50	1.09	1.000	0.99998
1453	2	3.29	9	395	1,792	0.005	43.89	0.22	1.000	0.99999
1454	1	1.13	165	11,281	935	0.176	68.37	12.07	1.000	0.99973
1455	4	5.38	31	1,798	389	0.080	58.00	4.62	1.107	0.99990
1523	5	6.69	11	804	723	0.015	73.09	1.11	1.000	0.99998
1841	1	1.75	650	68,401	649	1.002	105.23	105.39	1.000	0.99764
1843	3	3.38	5	263	1,086	0.005	52.60	0.24	1.000	0.99999
2091	1	1.42	8	684	879	0.009	85.50	0.78	1.000	0.99998
2171	1	0.90	1	54	563	0.002	54.00	0.10	1.000	0.99999
2211	1	3.42	1	205	723	0.001	205.00	0.28	1.000	0.99999
2492	1	2.05	1	123	29	0.034	123.00	4.24	1.000	0.99990
2621	4	7.70	37	3,724	1,168	0.032	100.65	3.19	1.000	0.99993
2921	1	1.35	15	1,223	375	0.040	81.53	3.26	1.000	0.99993
2962	1	0.28	1	17	257	0.004	17.00	0.07	1.000	0.99999
3121	2	3.62	2	217	1,131	0.002	108.50	0.19	1.000	0.99999
3122	4	4.33	80	8,080	849	0.094	101.00	9.52	1.067	0.99979
3123	1	0.42	14	356	702	0.020	25.43	0.51	1.000	0.99999

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3221	3	2.83	67	2,897	1,241	0.054	43.24	2.33	1.015	0.99995
3232	4	5.10	32	2,186	431	0.074	68.31	5.07	1.032	0.99989
3302	1	1.88	7	791	900	0.008	113.00	0.88	1.000	0.99998
3303	1	1.67	17	1,713	979	0.017	100.76	1.75	1.000	0.99996
3311	2	2.51	177	14,212	534	0.331	80.29	26.61	1.000	0.99940
3315	1	1.67	1	100	1,578	0.001	100.00	0.06	1.000	0.99999
3422	1	2.30	1	138	972	0.001	138.00	0.14	1.000	0.99999
3423	1	1.50	1	90	386	0.003	90.00	0.23	1.000	0.99999
3472	1	0.37	1	22	1,579	0.001	22.00	0.01	1.000	0.99999
3552	2	7.30	18	3,957	569	0.032	219.83	6.95	1.059	0.99984
3591	1	0.87	30	1,573	1,206	0.025	52.43	1.30	1.000	0.99997
3592	3	3.74	27	1,961	1,738	0.016	72.63	1.13	1.000	0.99997
3594	3	8.91	3	535	680	0.004	178.33	0.79	1.000	0.99998
3662	2	1.82	14	655	778	0.018	46.79	0.84	1.077	0.99998
3663	2	0.75	127	1,370	795	0.160	10.79	1.72	1.000	0.99996
3664	2	1.55	6	261	517	0.012	43.50	0.50	1.000	0.99999
3673	1	0.78	16	753	267	0.060	47.06	2.82	1.000	0.99994
3691	1	1.12	1	67	1,163	0.001	67.00	0.06	1.000	0.99999
3692	1	1.23	1	74	410	0.002	74.00	0.18	1.000	0.99999
3694	3	1.40	1,336	34,405	1,328	1.006	25.75	25.91	1.007	0.99942
3701	2	2.25	18	1,559	485	0.037	86.61	3.21	1.000	0.99993
3702	2	1.65	9	496	611	0.015	55.11	0.81	1.125	0.99998

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3751	2	1.05	32	373	885	0.036	11.66	0.42	1.000	0.99999
3872	1	1.63	1	98	1,067	0.001	98.00	0.09	1.000	0.99999
3893	1	0.57	1	34	1,111	0.001	34.00	0.03	1.000	0.99999
3894	1	1.17	116	8,120	116	1.000	70.00	70.00	1.000	0.99843
3901	1	1.28	15	1,159	880	0.017	77.27	1.32	1.000	0.99997
3912	1	2.00	1	120	1,142	0.001	120.00	0.11	1.000	0.99999
3913	1	0.62	49	1,832	809	0.061	37.39	2.26	1.000	0.99995
3914	1	1.33	24	1,927	373	0.064	80.29	5.17	1.000	0.99988
3951	2	6.18	926	244,031	927	0.999	263.53	263.25	1.001	0.99410
3952	2	1.65	80	3,513	1,264	0.063	43.91	2.78	1.000	0.99994
3953	4	6.94	4	416	523	0.008	104.00	0.80	1.000	0.99998
3981	5	4.77	31	2,209	1,503	0.021	71.26	1.47	1.000	0.99997
3982	1	1.05	70	4,405	1,768	0.040	62.93	2.49	1.000	0.99994
3991	6	6.48	28	1,755	726	0.039	62.68	2.42	1.037	0.99995
3992	1	0.75	1	45	166	0.006	45.00	0.27	1.000	0.99999
402	1	0.15	106	954	107	0.991	9.00	8.92	1.000	0.99980
4031	3	4.03	53	5,775	696	0.076	108.96	8.30	1.060	0.99981
405	1	1.40	53	4,468	53	1.000	84.30	84.30	1.000	0.99811
407	1	0.20	103	1,277	103	1.000	12.40	12.40	1.000	0.99972
4091	1	1.23	1,147	85,451	1,148	0.999	74.50	74.43	1.000	0.99833
4092	4	5.58	436	31,252	434	1.005	71.68	72.01	1.007	0.99839
4101	2	6.29	234	32,146	589	0.397	137.38	54.58	1.004	0.99878

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4102	1	2.55	5	765	903	0.006	153.00	0.85	1.000	0.99998
4137	2	4.75	2	285	794	0.003	142.50	0.36	1.000	0.99999
4141	1	1.73	1	104	82	0.012	104.00	1.27	1.000	0.99997
4142	1	0.88	1	53	597	0.002	53.00	0.09	1.000	0.99999
4151	1	1.03	1,241	77,004	1,243	0.998	62.05	61.95	1.000	0.99861
4152	1	1.03	816	51,095	819	0.996	62.62	62.39	1.000	0.99860
4153	3	4.73	49	3,342	1,284	0.038	68.20	2.60	1.000	0.99994
4154	2	1.97	1,236	74,884	1,209	1.022	60.59	61.94	1.026	0.99861
4155	2	2.05	67	4,071	2,133	0.031	60.76	1.91	1.000	0.99996
4171	2	2.63	1,157	99,982	2,274	0.508	86.41	43.96	1.009	0.99669
4172	2	2.23	1,781	152,608	1,724	1.033	85.69	88.52	1.033	0.99802
4173	3	2.82	646	56,526	633	1.021	87.50	89.30	1.021	0.99800
4211	1	1.20	4	291	707	0.006	72.75	0.41	1.000	0.99999
4301	1	1.00	29	1,759	102	0.284	60.66	17.25	1.000	0.99961
4302	2	3.80	3	359	650	0.005	119.67	0.55	1.000	0.99999
4303	3	6.19	70	6,685	980	0.071	95.50	6.82	1.014	0.99985
4313	1	0.90	1	54	320	0.003	54.00	0.17	1.000	0.99999
4324	2	3.20	21	3,057	1,253	0.017	145.57	2.44	1.000	0.99995
4341	3	2.32	44	1,968	1,783	0.025	44.73	1.10	1.023	0.99998
4342	6	8.69	95	11,358	1,752	0.054	119.56	6.48	1.080	0.99985
4343	1	1.47	6	529	1,024	0.006	88.17	0.52	1.000	0.99999
4362	2	4.62	2	277	828	0.002	138.50	0.33	1.000	0.99999

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4363	2	4.17	2	250	1,663	0.001	125.00	0.15	1.000	0.99999
4371	2	3.89	78	3,957	1,543	0.051	50.73	2.56	1.013	0.99994
4372	3	3.25	14	856	440	0.032	61.14	1.95	1.000	0.99996
4373	1	1.70	776	79,152	776	1.000	102.00	102.00	1.000	0.99772
4386	1	3.05	228	41,724	1,653	0.138	183.00	25.24	1.000	0.99943
4431	6	4.96	31	2,841	1,386	0.022	91.65	2.05	1.000	0.99995
4432	1	1.40	62	5,219	463	0.134	84.18	11.27	1.000	0.99975
4511	2	7.67	28	7,925	1,132	0.025	283.04	7.00	1.000	0.99984
4512	1	3.47	1	208	1,013	0.001	208.00	0.21	1.000	0.99999
455	1	4.22	1	253	168	0.006	253.00	1.51	1.000	0.99997
4601	1	0.73	259	11,490	415	0.624	44.36	27.69	1.000	0.99938
4692	1	1.12	3	201	470	0.006	67.00	0.43	1.000	0.99999
4714	2	4.52	134	22,836	328	0.409	170.42	69.62	1.126	0.99844
5601	4	2.40	85	2,277	1,164	0.073	26.79	1.96	1.000	0.99996
5603	1	1.73	53	5,534	1,288	0.041	104.42	4.30	1.000	0.99990
5902	2	1.60	66	3,730	1,002	0.066	56.52	3.72	1.000	0.99992
5903	2	1.38	36	1,505	255	0.141	41.81	5.90	1.000	0.99987
5904	4	8.08	29	5,934	1,223	0.024	204.62	4.85	1.000	0.99989
5905	2	3.23	2	194	1,875	0.001	97.00	0.10	1.000	0.99999
6021	1	0.65	14	558	1,275	0.011	39.86	0.44	1.000	0.99999
6141	1	1.62	20	1,940	635	0.031	97.00	3.06	1.000	0.99993
6143	1	1.77	1	106	372	0.003	106.00	0.28	1.000	0.99999

HIGHLY CONFIDENTIAL

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUSTOMERS SERVED	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
Total:	262	370.29	21,925	2,066,918	164,802	0.133	94.27	12.54	1.011	0.99972

THE EMPIRE DISTRICT ELECTRIC COMPANY
CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI
 9/1/2016 to 9/30/2016
 INCLUDING MAJOR EVENT DAYS

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1050	2	2.45	141	13,527	1,597	0.088	95.94	8.47	1.102	0.99980
1081	1	0.98	1	59	18	0.056	59.00	3.28	1.000	0.99992
1082	3	4.88	3	293	1,329	0.002	97.67	0.22	1.000	0.99999
1084	1	2.38	1	143	5	0.200	143.00	28.60	1.000	0.99934
1091	2	7.33	2	440	716	0.003	220.00	0.61	1.000	0.99999
1092	1	2.57	1	154	970	0.001	154.00	0.16	1.000	0.99999
1094	1	0.88	98	5,204	1,236	0.079	53.10	4.21	1.000	0.99990
1101	1	0.90	97	5,273	977	0.099	54.36	5.40	1.000	0.99988
1102	1	0.38	1	23	465	0.002	23.00	0.05	1.000	0.99999
1142	1	2.35	1	141	214	0.005	141.00	0.66	1.000	0.99998
1211	10	14.92	84	10,660	1,480	0.057	126.90	7.20	1.183	0.99983
1212	1	1.30	1	78	332	0.003	78.00	0.23	1.000	0.99999
1213	3	3.07	6	377	554	0.011	62.83	0.68	1.000	0.99998
1232	3	5.82	113	8,031	1,182	0.096	71.07	6.79	1.046	0.99984
1233	1	0.42	52	1,314	640	0.081	25.27	2.05	1.000	0.99995
1243	1	0.75	1	45	1,199	0.001	45.00	0.04	1.000	0.99999
1263	1	0.87	43	2,258	1,133	0.038	52.51	1.99	1.000	0.99995

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1264	1	2.25	1	135	18	0.056	135.00	7.50	1.000	0.99983
1271	3	3.20	14	495	962	0.015	35.36	0.51	1.000	0.99999
1273	2	2.08	68	5,258	865	0.079	77.32	6.08	1.015	0.99986
1282	1	1.55	38	3,571	1,035	0.037	93.97	3.45	1.000	0.99992
1284	1	1.55	24	2,241	945	0.025	93.38	2.37	1.000	0.99995
1285	1	0.73	50	2,241	1,092	0.046	44.82	2.05	1.000	0.99995
1312	1	1.13	12	821	934	0.013	68.42	0.88	1.000	0.99998
1453	2	1.52	19	926	1,794	0.011	48.74	0.52	1.056	0.99999
1454	3	3.60	962	33,397	935	1.029	34.72	35.72	1.053	0.99917
1522	1	0.80	3	146	102	0.029	48.67	1.43	1.000	0.99997
1523	2	2.06	748	59,101	723	1.035	79.01	81.74	1.036	0.99811
1841	2	2.26	8	545	649	0.012	68.13	0.84	1.000	0.99998
2052	1	1.40	1	84	85	0.012	84.00	0.99	1.000	0.99998
2091	2	1.92	22	1,277	879	0.025	58.05	1.45	2.000	0.99997
2092	2	1.71	4	151	917	0.004	37.75	0.16	1.333	0.99999
2171	1	1.83	7	773	564	0.012	110.43	1.37	1.000	0.99997
2211	6	10.72	50	4,055	723	0.069	81.10	5.61	1.020	0.99987
2212	2	3.85	2	231	1,296	0.002	115.50	0.18	1.000	0.99999
2501	1	1.97	1	118	84	0.012	118.00	1.40	1.000	0.99997
2621	1	1.17	1	70	1,167	0.001	70.00	0.06	1.000	0.99999
2921	12	6.76	21	960	375	0.056	45.71	2.56	1.000	0.99994
2951	2	0.57	2,772	47,631	1,393	1.990	17.18	34.19	2.000	0.99921

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
2952	1	0.75	23	1,046	155	0.148	45.48	6.75	1.000	0.99984
2961	1	3.55	24	5,123	648	0.037	213.46	7.91	1.000	0.99982
3122	3	5.37	94	8,464	849	0.111	90.04	9.97	1.000	0.99977
3221	7	8.66	204	17,294	1,241	0.164	84.77	13.94	1.417	0.99968
3222	1	2.33	2	281	770	0.003	140.50	0.36	1.000	0.99999
3231	1	1.15	198	13,662	411	0.482	69.00	33.24	1.000	0.99923
3232	1	1.13	431	29,308	431	1.000	68.00	68.00	1.000	0.99843
3303	3	9.65	46	10,265	979	0.047	223.15	10.49	1.045	0.99976
3313	1	1.12	16	1,080	1,336	0.012	67.50	0.81	1.000	0.99998
3315	3	2.08	33	850	1,578	0.021	25.76	0.54	1.000	0.99999
3422	2	4.94	23	1,641	972	0.024	71.35	1.69	1.045	0.99996
3471	1	1.70	2	204	170	0.012	102.00	1.20	1.000	0.99997
3472	2	0.87	13	351	1,579	0.008	27.00	0.22	1.083	0.99999
3552	1	7.43	10	4,460	572	0.017	446.00	7.80	1.000	0.99982
3553	1	1.20	1	72	1,040	0.001	72.00	0.07	1.000	0.99999
3591	3	4.14	34	2,176	1,206	0.028	64.00	1.80	1.000	0.99996
3592	9	28.37	62	12,770	1,740	0.036	205.97	7.34	1.033	0.99983
3593	1	0.95	1	57	929	0.001	57.00	0.06	1.000	0.99999
3662	2	2.25	40	2,910	778	0.051	72.75	3.74	1.000	0.99991
3663	1	8.47	126	63,986	795	0.158	507.83	80.49	1.000	0.99814
3664	3	9.66	3	580	516	0.006	193.33	1.12	1.000	0.99997
3675	1	1.58	23	2,185	415	0.055	95.00	5.27	1.000	0.99988

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3694	2	3.15	24	1,575	1,328	0.018	65.63	1.19	1.000	0.99997
3701	1	1.17	1	70	484	0.002	70.00	0.14	1.000	0.99999
3702	1	2.07	1	124	611	0.002	124.00	0.20	1.000	0.99999
3751	1	0.53	1	32	883	0.001	32.00	0.04	1.000	0.99999
3871	2	2.43	20	1,745	1,388	0.014	87.25	1.26	1.053	0.99997
3873	1	1.57	99	9,296	796	0.124	93.90	11.68	1.000	0.99973
3878	1	0.73	1	44	1,138	0.001	44.00	0.04	1.000	0.99999
3891	6	19.32	80	15,742	453	0.177	196.78	34.75	1.013	0.99920
3893	5	3.09	20	807	1,111	0.018	40.35	0.73	1.053	0.99998
3894	3	4.20	3	252	116	0.026	84.00	2.17	3.000	0.99995
3901	1	1.43	4	346	878	0.005	86.50	0.39	1.000	0.99999
3913	2	2.04	6	346	809	0.007	57.67	0.43	1.200	0.99999
3951	8	23.76	12	2,102	928	0.013	175.17	2.27	1.000	0.99995
3952	3	5.89	22	3,881	1,268	0.017	176.41	3.06	1.000	0.99993
3953	1	1.48	1	89	522	0.002	89.00	0.17	1.000	0.99999
3971	2	9.94	14	4,283	665	0.021	305.93	6.44	1.000	0.99985
3981	5	9.43	52	2,942	1,503	0.035	56.58	1.96	1.061	0.99995
3982	1	2.20	1	132	1,766	0.001	132.00	0.07	1.000	0.99999
3991	6	7.04	943	83,099	726	1.299	88.12	114.46	1.091	0.99735
3992	1	1.47	166	14,652	166	1.000	88.27	88.27	1.000	0.99796
4031	1	0.88	19	1,016	700	0.027	53.47	1.45	1.000	0.99997
4091	1	1.75	26	2,752	1,148	0.023	105.85	2.40	1.000	0.99994

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4101	1	1.02	1	61	588	0.002	61.00	0.10	1.000	0.99999
4138	1	0.13	1	8	744	0.001	8.00	0.01	1.000	0.99999
4151	2	2.17	2	130	1,244	0.002	65.00	0.10	1.000	0.99999
4152	4	4.12	11	568	820	0.013	51.64	0.69	1.000	0.99998
4153	1	1.77	1,284	136,167	1,284	1.000	106.05	106.05	1.000	0.99755
4172	9	10.24	528	44,421	1,724	0.306	84.13	25.77	1.027	0.99940
4212	2	4.90	2	294	816	0.002	147.00	0.36	1.000	0.99999
4222	7	8.73	327	34,545	1,044	0.313	105.64	33.09	1.912	0.99923
4223	1	0.60	1	36	826	0.001	36.00	0.04	1.000	0.99999
4303	1	7.25	12	5,084	981	0.012	423.67	5.18	1.000	0.99988
4311	1	1.05	23	1,452	791	0.029	63.13	1.84	1.000	0.99996
4313	2	1.42	5	248	320	0.016	49.60	0.78	1.000	0.99998
4324	1	0.57	19	648	1,253	0.015	34.11	0.52	1.000	0.99999
4331	1	0.40	1	24	305	0.003	24.00	0.08	1.000	0.99999
4332	2	2.07	2	124	304	0.007	62.00	0.41	1.000	0.99999
4333	2	1.30	753	45,438	683	1.102	60.34	66.53	1.000	0.99846
4341	2	1.43	75	3,585	1,783	0.042	47.80	2.01	1.000	0.99995
4342	1	0.58	1	35	1,752	0.001	35.00	0.02	1.000	0.99999
4343	1	2.33	9	1,268	1,024	0.009	140.89	1.24	1.000	0.99997
4362	1	2.33	39	5,363	828	0.047	137.51	6.48	1.000	0.99985
4363	5	7.54	55	4,216	1,662	0.033	76.65	2.54	1.038	0.99994
4372	1	1.00	1	60	440	0.002	60.00	0.14	1.000	0.99999

HIGHLY CONFIDENTIAL

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4373	1	1.32	5	398	776	0.006	79.60	0.51	1.000	0.99999
4386	1	1.05	228	14,403	1,653	0.138	63.17	8.71	1.000	0.99980
4431	1	1.28	1	77	1,386	0.001	77.00	0.06	1.000	0.99999
4511	9	13.66	33	3,650	1,132	0.029	110.61	3.22	1.000	0.99993
4512	1	2.57	3	464	1,014	0.003	154.67	0.46	1.000	0.99999
4601	1	0.75	1	45	415	0.002	45.00	0.11	1.000	0.99999
4602	2	2.56	38	3,526	948	0.040	92.79	3.72	1.027	0.99991
4692	1	0.63	28	1,082	470	0.060	38.64	2.30	1.000	0.99995
4714	3	6.35	36	5,320	328	0.110	147.78	16.22	1.029	0.99962
5601	2	1.39	69	2,781	1,164	0.059	40.30	2.39	1.000	0.99994
5603	4	2.87	96	4,498	1,288	0.075	46.85	3.49	1.021	0.99992
5902	2	2.85	54	1,701	1,007	0.054	31.50	1.69	1.019	0.99996
5904	2	1.13	162	5,550	1,223	0.132	34.26	4.54	1.013	0.99989
5905	3	3.97	19	1,870	1,875	0.010	98.42	1.00	1.000	0.99998
6021	5	4.57	73	2,615	1,275	0.057	35.82	2.05	1.014	0.99995
6022	1	0.62	21	792	490	0.043	37.71	1.62	1.000	0.99996
6024	1	0.52	13	405	393	0.033	31.15	1.03	1.000	0.99998
6141	2	1.58	21	849	635	0.033	40.43	1.34	1.000	0.99997
	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUSTOMERS SERVED	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
Total:	279	432.42	12,452	870,140	164,838	0.076	69.88	5.28	1.172	0.99988

THE EMPIRE DISTRICT ELECTRIC COMPANY
CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI
 9/1/2016 to 9/30/2016
 EXCLUDING MAJOR EVENT DAYS

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1050	2	2.45	141	13,527	1,597	0.088	95.94	8.47	1.102	0.99980
1081	1	0.98	1	59	18	0.056	59.00	3.28	1.000	0.99992
1082	3	4.88	3	293	1,329	0.002	97.67	0.22	1.000	0.99999
1084	1	2.38	1	143	5	0.200	143.00	28.60	1.000	0.99934
1091	2	7.33	2	440	716	0.003	220.00	0.61	1.000	0.99999
1092	1	2.57	1	154	970	0.001	154.00	0.16	1.000	0.99999
1094	1	0.88	98	5,204	1,236	0.079	53.10	4.21	1.000	0.99990
1101	1	0.90	97	5,273	977	0.099	54.36	5.40	1.000	0.99988
1102	1	0.38	1	23	465	0.002	23.00	0.05	1.000	0.99999
1142	1	2.35	1	141	214	0.005	141.00	0.66	1.000	0.99998
1211	10	14.92	84	10,660	1,480	0.057	126.90	7.20	1.183	0.99983
1212	1	1.30	1	78	332	0.003	78.00	0.23	1.000	0.99999
1213	3	3.07	6	377	554	0.011	62.83	0.68	1.000	0.99998
1232	3	5.82	113	8,031	1,182	0.096	71.07	6.79	1.046	0.99984
1233	1	0.42	52	1,314	640	0.081	25.27	2.05	1.000	0.99995
1243	1	0.75	1	45	1,199	0.001	45.00	0.04	1.000	0.99999
1263	1	0.87	43	2,258	1,133	0.038	52.51	1.99	1.000	0.99995

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
1264	1	2.25	1	135	18	0.056	135.00	7.50	1.000	0.99983
1271	3	3.20	14	495	962	0.015	35.36	0.51	1.000	0.99999
1273	2	2.08	68	5,258	865	0.079	77.32	6.08	1.015	0.99986
1282	1	1.55	38	3,571	1,035	0.037	93.97	3.45	1.000	0.99992
1284	1	1.55	24	2,241	945	0.025	93.38	2.37	1.000	0.99995
1285	1	0.73	50	2,241	1,092	0.046	44.82	2.05	1.000	0.99995
1312	1	1.13	12	821	934	0.013	68.42	0.88	1.000	0.99998
1453	2	1.52	19	926	1,794	0.011	48.74	0.52	1.056	0.99999
1454	3	3.60	962	33,397	935	1.029	34.72	35.72	1.053	0.99917
1522	1	0.80	3	146	102	0.029	48.67	1.43	1.000	0.99997
1523	2	2.06	748	59,101	723	1.035	79.01	81.74	1.036	0.99811
1841	2	2.26	8	545	649	0.012	68.13	0.84	1.000	0.99998
2052	1	1.40	1	84	85	0.012	84.00	0.99	1.000	0.99998
2091	2	1.92	22	1,277	879	0.025	58.05	1.45	2.000	0.99997
2092	2	1.71	4	151	917	0.004	37.75	0.16	1.333	0.99999
2171	1	1.83	7	773	564	0.012	110.43	1.37	1.000	0.99997
2211	6	10.72	50	4,055	723	0.069	81.10	5.61	1.020	0.99987
2212	2	3.85	2	231	1,296	0.002	115.50	0.18	1.000	0.99999
2501	1	1.97	1	118	84	0.012	118.00	1.40	1.000	0.99997
2621	1	1.17	1	70	1,167	0.001	70.00	0.06	1.000	0.99999
2921	12	6.76	21	960	375	0.056	45.71	2.56	1.000	0.99994
2951	2	0.57	2,772	47,631	1,393	1.990	17.18	34.19	2.000	0.99921

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
2952	1	0.75	23	1,046	155	0.148	45.48	6.75	1.000	0.99984
2961	1	3.55	24	5,123	648	0.037	213.46	7.91	1.000	0.99982
3122	3	5.37	94	8,464	849	0.111	90.04	9.97	1.000	0.99977
3221	7	8.66	204	17,294	1,241	0.164	84.77	13.94	1.417	0.99968
3222	1	2.33	2	281	770	0.003	140.50	0.36	1.000	0.99999
3231	1	1.15	198	13,662	411	0.482	69.00	33.24	1.000	0.99923
3232	1	1.13	431	29,308	431	1.000	68.00	68.00	1.000	0.99843
3303	3	9.65	46	10,265	979	0.047	223.15	10.49	1.045	0.99976
3313	1	1.12	16	1,080	1,336	0.012	67.50	0.81	1.000	0.99998
3315	3	2.08	33	850	1,578	0.021	25.76	0.54	1.000	0.99999
3422	2	4.94	23	1,641	972	0.024	71.35	1.69	1.045	0.99996
3471	1	1.70	2	204	170	0.012	102.00	1.20	1.000	0.99997
3472	2	0.87	13	351	1,579	0.008	27.00	0.22	1.083	0.99999
3552	1	7.43	10	4,460	572	0.017	446.00	7.80	1.000	0.99982
3553	1	1.20	1	72	1,040	0.001	72.00	0.07	1.000	0.99999
3591	3	4.14	34	2,176	1,206	0.028	64.00	1.80	1.000	0.99996
3592	9	28.37	62	12,770	1,740	0.036	205.97	7.34	1.033	0.99983
3593	1	0.95	1	57	929	0.001	57.00	0.06	1.000	0.99999
3662	2	2.25	40	2,910	778	0.051	72.75	3.74	1.000	0.99991
3663	1	8.47	126	63,986	795	0.158	507.83	80.49	1.000	0.99814
3664	3	9.66	3	580	516	0.006	193.33	1.12	1.000	0.99997
3675	1	1.58	23	2,185	415	0.055	95.00	5.27	1.000	0.99988

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
3694	2	3.15	24	1,575	1,328	0.018	65.63	1.19	1.000	0.99997
3701	1	1.17	1	70	484	0.002	70.00	0.14	1.000	0.99999
3702	1	2.07	1	124	611	0.002	124.00	0.20	1.000	0.99999
3751	1	0.53	1	32	883	0.001	32.00	0.04	1.000	0.99999
3871	2	2.43	20	1,745	1,388	0.014	87.25	1.26	1.053	0.99997
3873	1	1.57	99	9,296	796	0.124	93.90	11.68	1.000	0.99973
3878	1	0.73	1	44	1,138	0.001	44.00	0.04	1.000	0.99999
3891	6	19.32	80	15,742	453	0.177	196.78	34.75	1.013	0.99920
3893	5	3.09	20	807	1,111	0.018	40.35	0.73	1.053	0.99998
3894	3	4.20	3	252	116	0.026	84.00	2.17	3.000	0.99995
3901	1	1.43	4	346	878	0.005	86.50	0.39	1.000	0.99999
3913	2	2.04	6	346	809	0.007	57.67	0.43	1.200	0.99999
3951	8	23.76	12	2,102	928	0.013	175.17	2.27	1.000	0.99995
3952	3	5.89	22	3,881	1,268	0.017	176.41	3.06	1.000	0.99993
3953	1	1.48	1	89	522	0.002	89.00	0.17	1.000	0.99999
3971	2	9.94	14	4,283	665	0.021	305.93	6.44	1.000	0.99985
3981	5	9.43	52	2,942	1,503	0.035	56.58	1.96	1.061	0.99995
3982	1	2.20	1	132	1,766	0.001	132.00	0.07	1.000	0.99999
3991	6	7.04	943	83,099	726	1.299	88.12	114.46	1.091	0.99735
3992	1	1.47	166	14,652	166	1.000	88.27	88.27	1.000	0.99796
4031	1	0.88	19	1,016	700	0.027	53.47	1.45	1.000	0.99997
4091	1	1.75	26	2,752	1,148	0.023	105.85	2.40	1.000	0.99994

CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4101	1	1.02	1	61	588	0.002	61.00	0.10	1.000	0.99999
4138	1	0.13	1	8	744	0.001	8.00	0.01	1.000	0.99999
4151	2	2.17	2	130	1,244	0.002	65.00	0.10	1.000	0.99999
4152	4	4.12	11	568	820	0.013	51.64	0.69	1.000	0.99998
4153	1	1.77	1,284	136,167	1,284	1.000	106.05	106.05	1.000	0.99755
4172	9	10.24	528	44,421	1,724	0.306	84.13	25.77	1.027	0.99940
4212	2	4.90	2	294	816	0.002	147.00	0.36	1.000	0.99999
4222	7	8.73	327	34,545	1,044	0.313	105.64	33.09	1.912	0.99923
4223	1	0.60	1	36	826	0.001	36.00	0.04	1.000	0.99999
4303	1	7.25	12	5,084	981	0.012	423.67	5.18	1.000	0.99988
4311	1	1.05	23	1,452	791	0.029	63.13	1.84	1.000	0.99996
4313	2	1.42	5	248	320	0.016	49.60	0.78	1.000	0.99998
4324	1	0.57	19	648	1,253	0.015	34.11	0.52	1.000	0.99999
4331	1	0.40	1	24	305	0.003	24.00	0.08	1.000	0.99999
4332	2	2.07	2	124	304	0.007	62.00	0.41	1.000	0.99999
4333	2	1.30	753	45,438	683	1.102	60.34	66.53	1.000	0.99846
4341	2	1.43	75	3,585	1,783	0.042	47.80	2.01	1.000	0.99995
4342	1	0.58	1	35	1,752	0.001	35.00	0.02	1.000	0.99999
4343	1	2.33	9	1,268	1,024	0.009	140.89	1.24	1.000	0.99997
4362	1	2.33	39	5,363	828	0.047	137.51	6.48	1.000	0.99985
4363	5	7.54	55	4,216	1,662	0.033	76.65	2.54	1.038	0.99994
4372	1	1.00	1	60	440	0.002	60.00	0.14	1.000	0.99999

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CIRCUIT NUMBER	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUST. ON AFFECTED CIRCUITS	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
4373	1	1.32	5	398	776	0.006	79.60	0.51	1.000	0.99999
4386	1	1.05	228	14,403	1,653	0.138	63.17	8.71	1.000	0.99980
4431	1	1.28	1	77	1,386	0.001	77.00	0.06	1.000	0.99999
4511	9	13.66	33	3,650	1,132	0.029	110.61	3.22	1.000	0.99993
4512	1	2.57	3	464	1,014	0.003	154.67	0.46	1.000	0.99999
4601	1	0.75	1	45	415	0.002	45.00	0.11	1.000	0.99999
4602	2	2.56	38	3,526	948	0.040	92.79	3.72	1.027	0.99991
4692	1	0.63	28	1,082	470	0.060	38.64	2.30	1.000	0.99995
4714	3	6.35	36	5,320	328	0.110	147.78	16.22	1.029	0.99962
5601	2	1.39	69	2,781	1,164	0.059	40.30	2.39	1.000	0.99994
5603	4	2.87	96	4,498	1,288	0.075	46.85	3.49	1.021	0.99992
5902	2	2.85	54	1,701	1,007	0.054	31.50	1.69	1.019	0.99996
5904	2	1.13	162	5,550	1,223	0.132	34.26	4.54	1.013	0.99989
5905	3	3.97	19	1,870	1,875	0.010	98.42	1.00	1.000	0.99998
6021	5	4.57	73	2,615	1,275	0.057	35.82	2.05	1.014	0.99995
6022	1	0.62	21	792	490	0.043	37.71	1.62	1.000	0.99996
6024	1	0.52	13	405	393	0.033	31.15	1.03	1.000	0.99998
6141	2	1.58	21	849	635	0.033	40.43	1.34	1.000	0.99997
	NUMBER OF OUTAGES	OUTAGE HOURS REPORTED	CUSTOMERS AFFECTED	CUSTOMER OUTAGE MINUTES	TOTAL CUSTOMERS SERVED	SAIFI	CAIDI	SAIDI	CAIFI	ASAI
Total:	279	432.42	12,452	870,140	164,838	0.076	69.88	5.28	1.172	0.99988