



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

Table of Contents

|                                            |    |
|--------------------------------------------|----|
| Introduction .....                         | 2  |
| Definitions .....                          | 2  |
| Reliability Metrics .....                  | 3  |
| Multi-Year Worst Performing Circuits ..... | 6  |
| 2017 Worst Performing Circuits .....       | 10 |



## Introduction

This report details Empire District's (Empire) annual reliability metrics and worst performing circuits for calendar year 2017 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

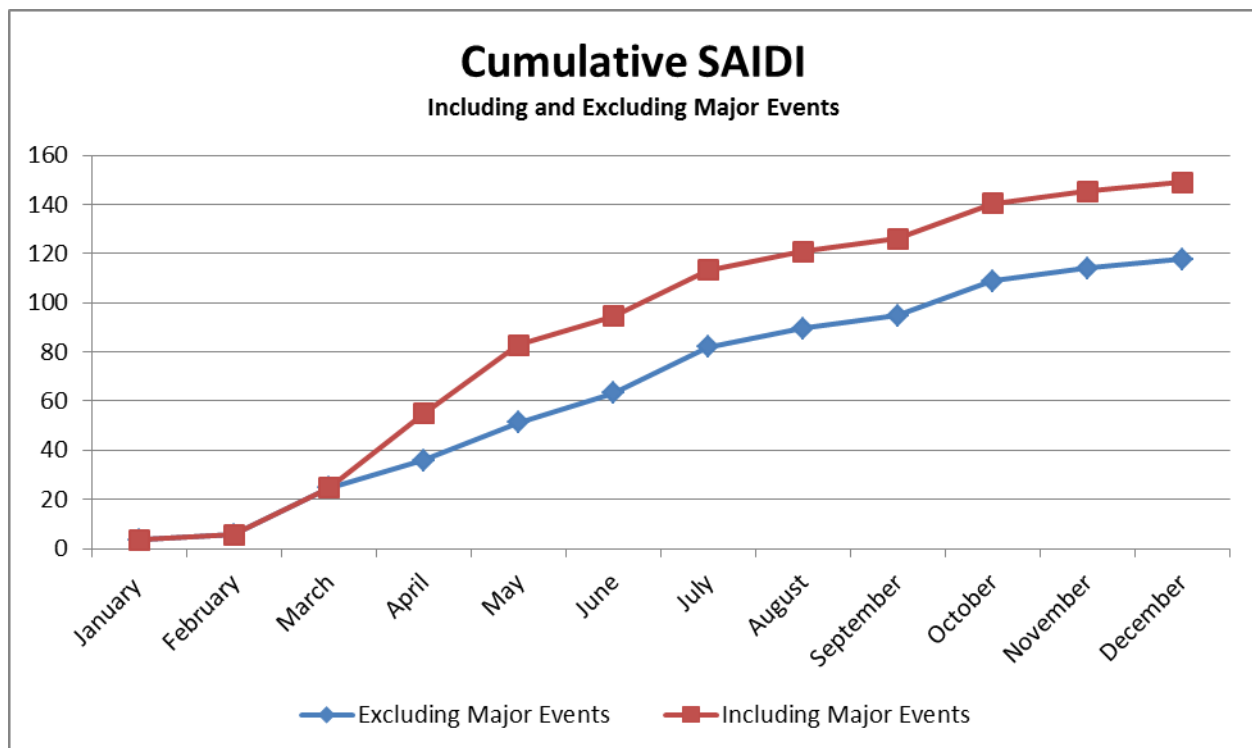
For the purpose of this report, the following definitions shall apply:

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 1366-2012 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.



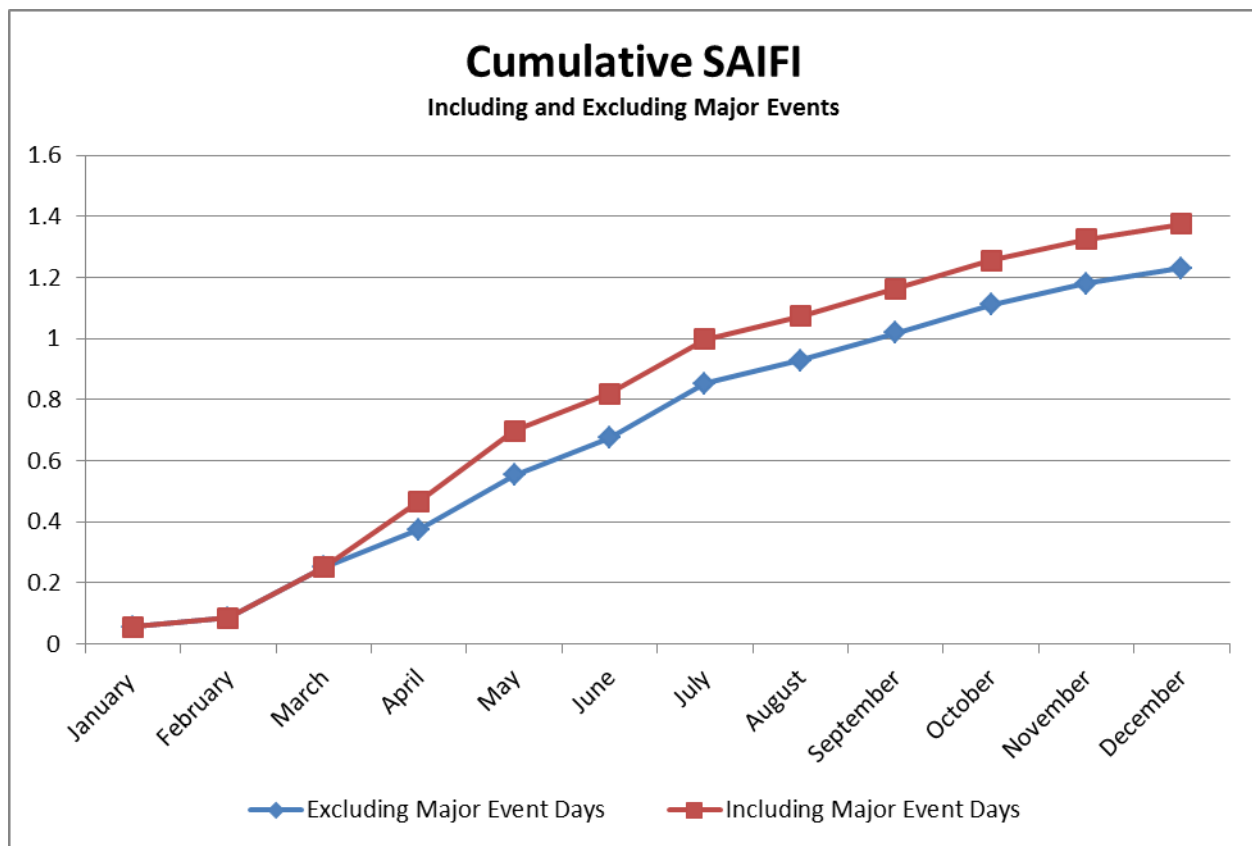
## Reliability Metrics

| SAIDI     |        |        |
|-----------|--------|--------|
| Month     | EME    | IME    |
| January   | 3.42   | 3.42   |
| February  | 5.74   | 5.74   |
| March     | 24.20  | 24.20  |
| April     | 35.31  | 54.49  |
| May       | 50.92  | 82.30  |
| June      | 62.69  | 94.07  |
| July      | 81.38  | 112.76 |
| August    | 88.99  | 120.37 |
| September | 94.16  | 125.54 |
| October   | 108.35 | 139.73 |
| November  | 113.47 | 144.85 |
| December  | 117.10 | 148.48 |



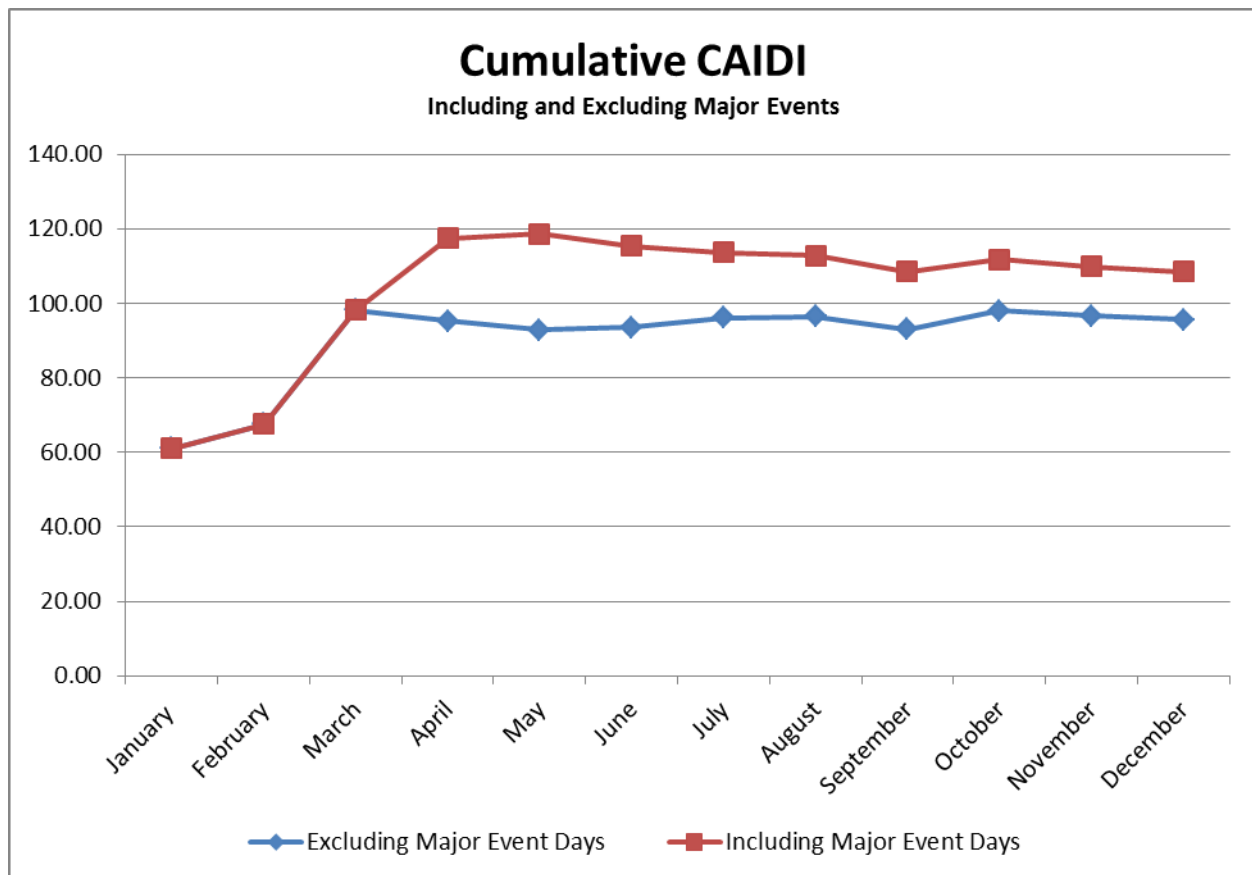


| SAIFI     |       |       |
|-----------|-------|-------|
| Month     | EME   | IME   |
| January   | 0.056 | 0.056 |
| February  | 0.085 | 0.085 |
| March     | 0.245 | 0.245 |
| April     | 0.369 | 0.462 |
| May       | 0.547 | 0.692 |
| June      | 0.668 | 0.813 |
| July      | 0.845 | 0.99  |
| August    | 0.921 | 1.066 |
| September | 1.011 | 1.156 |
| October   | 1.104 | 1.249 |
| November  | 1.172 | 1.317 |
| December  | 1.223 | 1.368 |





| CAIDI     |       |        |
|-----------|-------|--------|
| Month     | EME   | IME    |
| January   | 61.07 | 61.07  |
| February  | 67.53 | 67.53  |
| March     | 98.78 | 98.78  |
| April     | 95.69 | 117.94 |
| May       | 93.09 | 118.93 |
| June      | 93.85 | 115.71 |
| July      | 96.31 | 113.90 |
| August    | 96.62 | 112.92 |
| September | 93.14 | 108.60 |
| October   | 98.14 | 111.87 |
| November  | 96.82 | 109.98 |
| December  | 95.75 | 108.54 |





### 2017 Multi-Year Worst Performing Circuits

Empire has identified three 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 2017 SAIFI value. A more detailed list of each circuit’s corrective action will follow.

| Multi-Year Worst Performing Circuits<br>SAIFI<br>2015 - 2017 |                |       |       |       |
|--------------------------------------------------------------|----------------|-------|-------|-------|
| Location                                                     | Circuit Number | 2017  | 2016  | 2015  |
| Anderson - Southwest                                         | 3221           | 3.470 | 0.343 | 3.149 |
| Seneca - East                                                | 3751           | 4.389 | 1.459 | 4.425 |
| Marionville - North                                          | 4373           | 5.180 | 2.086 | 4.129 |



**Circuit: 3221**

**Area Served: Anderson, Missouri**

**2017 SAIFI: 3.470**

**2016 SAIFI: 0.343**

**2015 SAIFI: 3.149**

This circuit received an infrared inspection in 2015 and a comprehensive intrusive inspection in 2012. A visual inspection is scheduled in 2021. The repair work identified as a result of the inspections will be completed in accordance with Empire's infrastructure inspection policy.

Vegetation maintenance was performed in 2017. The circuit is also scheduled for regular maintenance again in 2021.

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

Empire is re-evaluating the current sectionalization and protection coordination to determine if additional equipment is appropriate. Empire will also continue to monitor the performance of circuit 3221 and evaluate cost effective solutions to further improve service reliability.

A future transmission sectionalization project affecting the substation sourcing circuit 3221 is planned as a part of Empire's Operation Toughen Up reliability initiative.

**Circuit: 3751****Area Served: Seneca, Missouri****2017 SAIFI: 4.389****2016 SAIFI: 1.459****2015 SAIFI: 4.425**

This circuit received a visual inspection in 2013 and a comprehensive intrusive inspection in 2014. 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 2016 and is scheduled for a mid-cycle clearing in 2018.

A coordination study and sectionalizing corrective action program was completed in 2012.

Empire is re-evaluating the current sectionalization and protection coordination to determine if additional equipment is appropriate. Empire will also continue to monitor the performance of circuit 3751 and evaluate cost effective solutions to further improve service reliability.

A future transmission sectionalization project affecting the substation sourcing circuit 3751 is planned as a part of Empire's Operation Toughen Up reliability initiative.





**Circuit: 4373**

**Area Served: Marionville, Missouri**

**2017 SAIFI: 5.180**

**2016 SAIFI: 2.086**

**2015 SAIFI: 4.129**

This circuit received a visual inspection in 2013 and is receiving a comprehensive intrusive inspection in 2018. 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 mid-cycle clearing was performed in 2017. The circuit is also scheduled for regular maintenance in 2020.

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

Empire is re-evaluating the current sectionalization and protection coordination to determine if additional equipment is appropriate. Empire will also continue to monitor the performance of circuit 4373 and evaluate cost effective solutions to further improve service reliability



| Worst Performing Circuits - System 2017 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 - West 7th Street                                  | 1451           | 20                | 31.43                 | 337294                  | 2981               | 526                             | 214  | 5.667 | 641.24 | 113.15 |
| Marionville - North                                       | 4373           | 27                | 53.47                 | 535957                  | 4022               | 776                             | 211  | 5.180 | 690.31 | 133.26 |
| Seneca - East                                             | 3751           | 57                | 167.62                | 492867                  | 3876               | 883                             | 216  | 4.389 | 558.06 | 127.16 |
| Neosho - East                                             | 3982           | 45                | 73.87                 | 468462                  | 6639               | 1769                            | 216  | 3.754 | 264.88 | 70.56  |
| Neosho - Rocketdyne 69 KV                                 | 2961           | 30                | 98.85                 | 211146                  | 2408               | 648                             | 216  | 3.716 | 325.84 | 87.69  |
| Anderson - Southwest                                      | 3221           | 36                | 60.62                 | 310229                  | 4312               | 1243                            | 216  | 3.470 | 249.62 | 71.95  |
| Noel City                                                 | 4431           | 57                | 87.94                 | 438485                  | 4749               | 1387                            | 216  | 3.425 | 316.20 | 92.33  |
| Tipton Ford                                               | 2921           | 17                | 30.61                 | 96796                   | 1224               | 375                             | 214  | 3.264 | 258.12 | 79.08  |
| Fair Play - East                                          | 2172           | 7                 | 14.73                 | 90982                   | 677                | 223                             | 213  | 3.034 | 407.69 | 134.39 |
| Neosho - Rocketdyne 69 KV                                 | 2962           | 5                 | 32.41                 | 40988                   | 773                | 257                             | 216  | 3.008 | 159.49 | 53.02  |
| Joplin - 10th Street                                      | 401            | 3                 | 5.98                  | 39032                   | 324                | 108                             | 214  | 3.000 | 361.41 | 120.47 |
| Anderson - Southwest                                      | 3222           | 36                | 50.43                 | 159585                  | 2281               | 772                             | 216  | 2.955 | 206.72 | 69.96  |
| Greenfield                                                | 6141           | 20                | 39.97                 | 263825                  | 1859               | 634                             | 213  | 2.931 | 415.96 | 141.92 |
| Carl Junction - Northeast                                 | 3662           | 22                | 25.61                 | 126990                  | 2258               | 781                             | 215  | 2.893 | 162.68 | 56.24  |



**Circuit: 1451**  
**Area Served: Joplin, Missouri**  
**2017 SAIFI: 7.527**

This circuit received a comprehensive intrusive inspection in 2014 and a visual inspection in 2017. The circuit is scheduled to receive an infrared inspection in 2021. The repair work identified as a result of the inspections will be completed in accordance with Empire's infrastructure inspection policy.

Vegetation maintenance was performed in 2017 and is scheduled again for 2021.

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

**Circuit: 4373**  
**Area Served: Marionville, Missouri**  
**2017 SAIFI: 5.180**  
**2016 SAIFI: 2.086**

This circuit received a visual inspection in 2013 and is receiving a comprehensive intrusive inspection in 2018. 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 mid-cycle clearing was performed in 2017. The circuit is also scheduled for regular maintenance in 2020.

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

Empire is re-evaluating the current sectionalization and protection coordination to determine if additional equipment is appropriate. Empire will also continue to monitor the performance of circuit 4373 and evaluate cost effective solutions to further improve service reliability.

**Circuit: 3751****Area Served: Seneca, Missouri****2017 SAIFI: 4.389****2016 SAIFI: 1.459**

This circuit received a visual inspection in 2013 and a comprehensive intrusive inspection in 2014. 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 2016 and is scheduled for a mid-cycle clearing in 2018.

A coordination study and sectionalizing corrective action program was completed in 2012.

Empire is re-evaluating the current sectionalization and protection coordination to determine if additional equipment is appropriate. Empire will also continue to monitor the performance of circuit 3751 and evaluate cost effective solutions to further improve service reliability.

A future transmission sectionalization project is planned as a part of Empire's Operation Toughen Up reliability initiative.

**Circuit: 3982****Area Served: Neosho, Missouri****2017 SAIFI: 3.754**

This circuit received a visual inspection in 2017 and a comprehensive intrusive inspection in 2016. This circuit is scheduled to receive an infrared inspection in 2021. The repair work identified as a result of the inspections will be completed in accordance with Empire's infrastructure inspection policy.

Vegetation clearing is scheduled for 2018.

A coordination study and sectionalizing corrective action program was performed in 2012.



**Circuit: 2961**  
**Area Served: Neosho, Missouri**  
**2017 SAIFI: 3.716**

This circuit received an infrared inspection in 2016. This circuit is scheduled to receive a visually inspection in 2020 and a comprehensive intrusive inspection in 2023. The repair work identified as a result of the inspections will be completed in accordance with Empire's infrastructure inspection policy.

Vegetation clearing is scheduled for 2018.

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

**Circuit: 3221**  
**Area Served: Anderson, Missouri**  
**2017 SAIFI: 3.470**  
**2016 SAIFI: 0.343**

This circuit received an infrared inspection in 2015 and a comprehensive intrusive inspection in 2012. A visual inspection is scheduled in 2021. The repair work identified as a result of the inspections will be completed in accordance with Empire's infrastructure inspection policy.

Vegetation maintenance was performed in 2017. The circuit is also scheduled for regular maintenance again in 2021.

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

Empire is re-evaluating the current sectionalization and protection coordination to determine if additional equipment is appropriate. Empire will also continue to monitor the performance of circuit 3221 and evaluate cost effective solutions to further improve service reliability.

A future transmission sectionalization project is planned as a part of Empire's Operation Toughen Up reliability initiative.



**Circuit: 4431**  
**Area Served: Noel, Missouri**  
**2017 SAIFI: 3.425**

This circuit received a visual inspection in 2011 and an infrared inspection in 2017. This circuit is scheduled to receive a comprehensive intrusive inspection in 2018 and its next visual inspection in 2023. 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 2013.

**Circuit: 2921**  
**Area Served: Tipton Ford, Missouri**  
**2017 SAIFI: 3.264**

This circuit received a visual inspection in 2017. This circuit is scheduled to receive a comprehensive intrusive inspection in 2019 and an infrared inspection in 2023. The repair work identified as a result of the inspections will be completed in accordance with Empire's infrastructure inspection policy.

Vegetation mid-cycle clearing was performed in 2016. The circuit is scheduled for regular maintenance in 2019.

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

**Circuit: 2172**  
**Area Served: Fair Play, Missouri**  
**2017 SAIFI: 3.034**

This circuit received an infrared inspection in 2014 and a comprehensive intrusive inspection in 2009. A visual inspection is scheduled 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 2017 and is scheduled again for 2023.

A coordination study and sectionalizing corrective action program was performed in 2016.



**Circuit: 2962**  
**Area Served: Neosho, Missouri**  
**2017 SAIFI: 3.008**

This circuit received a visual inspection in 2009, an infrared inspection in 2015, and a comprehensive intrusive inspection in 2012. 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 mid-cycle clearing was performed in 2017. The circuit is also scheduled for regular maintenance in 2019.

A coordination study and sectionalizing corrective action program was performed in 2016.

**Circuit: 401**  
**Area Served: Joplin, Missouri**  
**2017 SAIFI: 3.000**

This circuit received an infrared inspection in 2014. This circuit is scheduled to receive a visual inspection in 2018 and a comprehensive intrusive inspection in 2021. The repair work identified as a result of the inspections will be completed in accordance with Empire's infrastructure inspection policy.

Vegetation mid-cycle clearing was performed in 2017. The circuit is also scheduled for regular maintenance in 2019.

**Circuit: 3222**  
**Area Served: Anderson, Missouri**  
**2017 SAIFI: 2.955**

This circuit received a comprehensive intrusive inspection in 2012 and a visual inspection in 2013. This circuit is scheduled to receive an infrared inspection in 2019 and a comprehensive intrusive inspection in 2024. 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 2022.

A coordination study and sectionalizing corrective action program for circuit 3222 was completed in 2014.

**Circuit: 6141****Area Served: Greenfield, Missouri****2016 SAIFI: 2.931**

This circuit received a visual inspection in 2009 and an infrared inspection in 2015. This circuit is scheduled to receive a comprehensive intrusive 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 2016 and regular maintenance is scheduled in 2019.

A coordination study and sectionalizing corrective action program for circuit 6141 was completed in 2012.

**Circuit: 3662****Area Served: Carl Junction, Missouri****2016 SAIFI: 2.893**

This circuit received a visual inspection in 2013 and a comprehensive intrusive inspection in 2015. This circuit is scheduled to receive an infrared 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 is scheduled for 2018.

A coordination study and sectionalizing corrective action program for circuit 3662 was completed in 2015.



**THE EMPIRE DISTRICT ELECTRIC COMPANY**  
**CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI**  
1/1/2017 to 1/31/2017  
INCLUDING MAJOR EVENT DAYS

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 1050              | 3                    | 7.21                        | 145                   | 21,899                        | 1,597                                  | 0.091 | 151.03 | 13.71 | 1.051 | 0.99969 |
| 1052              | 1                    | 5.65                        | 1                     | 339                           | 1,162                                  | 0.001 | 339.00 | 0.29  | 1.000 | 0.99999 |
| 1082              | 5                    | 5.13                        | 5                     | 308                           | 1,330                                  | 0.004 | 61.60  | 0.23  | 1.000 | 0.99999 |
| 1091              | 3                    | 3.27                        | 3                     | 196                           | 716                                    | 0.004 | 65.33  | 0.27  | 1.000 | 0.99999 |
| 1094              | 1                    | 1.08                        | 23                    | 1,501                         | 1,237                                  | 0.019 | 65.26  | 1.21  | 1.000 | 0.99997 |
| 1211              | 7                    | 10.61                       | 73                    | 6,614                         | 1,479                                  | 0.049 | 90.60  | 4.47  | 3.174 | 0.99990 |
| 1212              | 1                    | 1.32                        | 3                     | 237                           | 332                                    | 0.009 | 79.00  | 0.71  | 1.000 | 0.99998 |
| 1213              | 2                    | 1.90                        | 2                     | 114                           | 554                                    | 0.004 | 57.00  | 0.21  | 1.000 | 0.99999 |
| 1230              | 1                    | 3.35                        | 70                    | 14,072                        | 1,179                                  | 0.059 | 201.03 | 11.94 | 1.000 | 0.99973 |
| 1232              | 1                    | 0.82                        | 13                    | 640                           | 1,183                                  | 0.011 | 49.23  | 0.54  | 1.000 | 0.99999 |
| 1241              | 1                    | 0.57                        | 7                     | 238                           | 853                                    | 0.008 | 34.00  | 0.28  | 1.000 | 0.99999 |
| 1261              | 1                    | 0.62                        | 1                     | 37                            | 397                                    | 0.003 | 37.00  | 0.09  | 1.000 | 0.99999 |
| 1263              | 1                    | 2.07                        | 1                     | 124                           | 1,132                                  | 0.001 | 124.00 | 0.11  | 1.000 | 0.99999 |
| 1265              | 1                    | 0.65                        | 1                     | 39                            | 1,282                                  | 0.001 | 39.00  | 0.03  | 1.000 | 0.99999 |
| 1273              | 4                    | 2.35                        | 4                     | 141                           | 865                                    | 0.005 | 35.25  | 0.16  | 1.000 | 0.99999 |
| 1282              | 1                    | 0.62                        | 93                    | 3,524                         | 1,035                                  | 0.090 | 37.89  | 3.40  | 1.000 | 0.99992 |
| 1284              | 3                    | 3.52                        | 116                   | 7,271                         | 948                                    | 0.122 | 62.68  | 7.67  | 1.303 | 0.99983 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 1312              | 1                    | 1.32                        | 1                     | 79                            | 934                                    | 0.001 | 79.00  | 0.08   | 1.000 | 0.99999 |
| 1454              | 1                    | 0.92                        | 1                     | 55                            | 935                                    | 0.001 | 55.00  | 0.06   | 1.000 | 0.99999 |
| 1455              | 1                    | 2.25                        | 1                     | 135                           | 389                                    | 0.003 | 135.00 | 0.35   | 1.000 | 0.99999 |
| 1523              | 2                    | 1.93                        | 9                     | 662                           | 723                                    | 0.012 | 73.56  | 0.92   | 1.000 | 0.99998 |
| 1842              | 1                    | 1.45                        | 1                     | 87                            | 280                                    | 0.004 | 87.00  | 0.31   | 1.000 | 0.99999 |
| 1843              | 2                    | 2.12                        | 26                    | 1,665                         | 1,085                                  | 0.024 | 64.04  | 1.53   | 1.000 | 0.99997 |
| 2091              | 1                    | 2.07                        | 1                     | 124                           | 879                                    | 0.001 | 124.00 | 0.14   | 1.000 | 0.99999 |
| 2171              | 1                    | 0.80                        | 1                     | 48                            | 564                                    | 0.002 | 48.00  | 0.09   | 1.000 | 0.99999 |
| 2211              | 6                    | 6.39                        | 6                     | 383                           | 723                                    | 0.008 | 63.83  | 0.53   | 1.000 | 0.99999 |
| 2511              | 3                    | 7.34                        | 660                   | 67,901                        | 618                                    | 1.068 | 102.88 | 109.87 | 1.068 | 0.99754 |
| 2621              | 3                    | 4.47                        | 14                    | 1,670                         | 1,166                                  | 0.012 | 119.29 | 1.43   | 1.077 | 0.99997 |
| 2921              | 11                   | 22.78                       | 92                    | 11,348                        | 375                                    | 0.245 | 123.35 | 30.26  | 1.057 | 0.99932 |
| 2951              | 2                    | 1.94                        | 26                    | 1,520                         | 1,395                                  | 0.019 | 58.46  | 1.09   | 1.000 | 0.99998 |
| 2961              | 1                    | 0.40                        | 1                     | 24                            | 648                                    | 0.002 | 24.00  | 0.04   | 1.000 | 0.99999 |
| 3122              | 2                    | 3.22                        | 4                     | 537                           | 849                                    | 0.005 | 134.25 | 0.63   | 1.000 | 0.99999 |
| 3181              | 1                    | 1.37                        | 55                    | 4,535                         | 724                                    | 0.076 | 82.45  | 6.26   | 1.000 | 0.99986 |
| 3232              | 1                    | 0.98                        | 1                     | 59                            | 431                                    | 0.002 | 59.00  | 0.14   | 1.000 | 0.99999 |
| 3314              | 2                    | 3.91                        | 220                   | 29,527                        | 222                                    | 0.991 | 134.21 | 133.00 | 1.005 | 0.99702 |
| 3315              | 1                    | 0.88                        | 13                    | 695                           | 1,578                                  | 0.008 | 53.46  | 0.44   | 1.000 | 0.99999 |
| 3422              | 3                    | 9.55                        | 8                     | 1,677                         | 971                                    | 0.008 | 209.63 | 1.73   | 1.000 | 0.99996 |
| 3423              | 1                    | 1.12                        | 1                     | 67                            | 386                                    | 0.003 | 67.00  | 0.17   | 1.000 | 0.99999 |
| 3472              | 2                    | 1.21                        | 4                     | 115                           | 1,579                                  | 0.003 | 28.75  | 0.07   | 1.333 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 3553              | 2                    | 2.24                        | 33                    | 1,298                         | 1,041                                  | 0.032 | 39.33  | 1.25  | 1.000 | 0.99997 |
| 3592              | 1                    | 0.88                        | 1                     | 53                            | 1,741                                  | 0.001 | 53.00  | 0.03  | 1.000 | 0.99999 |
| 3621              | 1                    | 0.68                        | 1                     | 41                            | 1,558                                  | 0.001 | 41.00  | 0.03  | 1.000 | 0.99999 |
| 3661              | 3                    | 3.18                        | 12                    | 887                           | 1,027                                  | 0.012 | 73.92  | 0.86  | 1.000 | 0.99998 |
| 3662              | 2                    | 1.80                        | 779                   | 3,968                         | 778                                    | 1.001 | 5.09   | 5.10  | 1.001 | 0.99989 |
| 3663              | 1                    | 0.93                        | 1                     | 56                            | 795                                    | 0.001 | 56.00  | 0.07  | 1.000 | 0.99999 |
| 3673              | 1                    | 0.80                        | 10                    | 486                           | 267                                    | 0.037 | 48.60  | 1.82  | 1.000 | 0.99996 |
| 3691              | 1                    | 1.32                        | 49                    | 3,905                         | 1,163                                  | 0.042 | 79.69  | 3.36  | 1.000 | 0.99992 |
| 3692              | 1                    | 2.35                        | 19                    | 2,681                         | 410                                    | 0.046 | 141.11 | 6.54  | 1.000 | 0.99985 |
| 3694              | 2                    | 5.12                        | 11                    | 2,528                         | 1,328                                  | 0.008 | 229.82 | 1.90  | 1.000 | 0.99996 |
| 3702              | 1                    | 0.87                        | 1                     | 52                            | 611                                    | 0.002 | 52.00  | 0.09  | 1.000 | 0.99999 |
| 3751              | 20                   | 17.66                       | 373                   | 20,636                        | 881                                    | 0.423 | 55.32  | 23.42 | 1.028 | 0.99948 |
| 3872              | 1                    | 0.78                        | 1                     | 47                            | 1,067                                  | 0.001 | 47.00  | 0.04  | 1.000 | 0.99999 |
| 3893              | 4                    | 5.63                        | 53                    | 4,572                         | 1,111                                  | 0.048 | 86.26  | 4.12  | 1.019 | 0.99991 |
| 3901              | 1                    | 1.13                        | 45                    | 3,069                         | 877                                    | 0.051 | 68.20  | 3.50  | 1.000 | 0.99992 |
| 3912              | 1                    | 5.90                        | 9                     | 3,186                         | 1,160                                  | 0.008 | 354.00 | 2.75  | 1.000 | 0.99994 |
| 3913              | 2                    | 2.31                        | 809                   | 33,284                        | 809                                    | 1.000 | 41.14  | 41.14 | 1.002 | 0.99908 |
| 3951              | 3                    | 5.45                        | 87                    | 7,621                         | 928                                    | 0.094 | 87.60  | 8.21  | 1.024 | 0.99982 |
| 3952              | 3                    | 4.98                        | 16                    | 2,517                         | 1,273                                  | 0.013 | 157.31 | 1.98  | 1.143 | 0.99996 |
| 3953              | 4                    | 2.66                        | 4                     | 160                           | 522                                    | 0.008 | 40.00  | 0.31  | 2.000 | 0.99999 |
| 3981              | 2                    | 2.18                        | 21                    | 1,371                         | 1,503                                  | 0.014 | 65.29  | 0.91  | 1.000 | 0.99998 |
| 3982              | 2                    | 1.17                        | 53                    | 2,404                         | 1,765                                  | 0.030 | 45.36  | 1.36  | 1.000 | 0.99997 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 3991              | 1                    | 0.65                        | 37                    | 1,443                         | 726                                    | 0.051 | 39.00  | 1.99  | 1.000 | 0.99996 |
| 3992              | 1                    | 0.53                        | 22                    | 714                           | 166                                    | 0.133 | 32.45  | 4.30  | 1.000 | 0.99990 |
| 4091              | 3                    | 8.56                        | 19                    | 1,718                         | 1,148                                  | 0.017 | 90.42  | 1.50  | 1.000 | 0.99997 |
| 4092              | 3                    | 5.18                        | 3                     | 311                           | 434                                    | 0.007 | 103.67 | 0.72  | 1.000 | 0.99998 |
| 4101              | 1                    | 0.60                        | 1                     | 36                            | 588                                    | 0.002 | 36.00  | 0.06  | 1.000 | 0.99999 |
| 4134              | 2                    | 1.77                        | 16                    | 1,268                         | 835                                    | 0.019 | 79.25  | 1.52  | 1.000 | 0.99997 |
| 4136              | 1                    | 2.57                        | 1                     | 154                           | 669                                    | 0.001 | 154.00 | 0.23  | 1.000 | 0.99999 |
| 4137              | 1                    | 2.58                        | 1                     | 155                           | 794                                    | 0.001 | 155.00 | 0.20  | 1.000 | 0.99999 |
| 4138              | 2                    | 2.18                        | 46                    | 2,692                         | 745                                    | 0.062 | 58.52  | 3.61  | 1.000 | 0.99992 |
| 4141              | 1                    | 1.55                        | 1                     | 93                            | 82                                     | 0.012 | 93.00  | 1.13  | 1.000 | 0.99997 |
| 4142              | 2                    | 1.39                        | 50                    | 2,038                         | 597                                    | 0.084 | 40.76  | 3.41  | 1.020 | 0.99992 |
| 4151              | 1                    | 1.35                        | 852                   | 69,012                        | 1,246                                  | 0.684 | 81.00  | 55.39 | 1.000 | 0.99876 |
| 4154              | 2                    | 2.35                        | 134                   | 11,737                        | 1,209                                  | 0.111 | 87.59  | 9.71  | 1.000 | 0.99978 |
| 4155              | 1                    | 2.00                        | 8                     | 960                           | 2,133                                  | 0.004 | 120.00 | 0.45  | 1.000 | 0.99999 |
| 4172              | 2                    | 2.33                        | 1,726                 | 98,662                        | 1,724                                  | 1.001 | 57.16  | 57.23 | 1.002 | 0.99872 |
| 4173              | 1                    | 0.57                        | 1,780                 | 61,831                        | 634                                    | 2.808 | 34.74  | 97.53 | 1.000 | 0.99782 |
| 4181              | 1                    | 3.17                        | 1                     | 190                           | 492                                    | 0.002 | 190.00 | 0.39  | 1.000 | 0.99999 |
| 4212              | 4                    | 7.90                        | 38                    | 4,449                         | 818                                    | 0.046 | 117.08 | 5.44  | 1.027 | 0.99988 |
| 4223              | 1                    | 1.05                        | 1                     | 63                            | 826                                    | 0.001 | 63.00  | 0.08  | 1.000 | 0.99999 |
| 4224              | 3                    | 2.65                        | 65                    | 3,234                         | 753                                    | 0.086 | 49.75  | 4.29  | 1.102 | 0.99990 |
| 4311              | 1                    | 2.35                        | 1                     | 141                           | 791                                    | 0.001 | 141.00 | 0.18  | 1.000 | 0.99999 |
| 4324              | 2                    | 0.71                        | 2                     | 43                            | 1,253                                  | 0.002 | 21.50  | 0.03  | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 4341              | 1                    | 0.58                        | 27                    | 964                           | 1,783                                  | 0.015 | 35.70  | 0.54  | 1.000 | 0.99999 |
| 4343              | 5                    | 3.74                        | 20                    | 1,096                         | 1,025                                  | 0.020 | 54.80  | 1.07  | 1.111 | 0.99998 |
| 4362              | 1                    | 0.80                        | 1                     | 48                            | 828                                    | 0.001 | 48.00  | 0.06  | 1.000 | 0.99999 |
| 4363              | 1                    | 0.43                        | 26                    | 682                           | 1,662                                  | 0.016 | 26.23  | 0.41  | 1.000 | 0.99999 |
| 4371              | 1                    | 1.60                        | 1                     | 96                            | 1,543                                  | 0.001 | 96.00  | 0.06  | 1.000 | 0.99999 |
| 4372              | 1                    | 1.62                        | 7                     | 685                           | 440                                    | 0.016 | 97.86  | 1.56  | 1.000 | 0.99997 |
| 4373              | 1                    | 1.02                        | 1                     | 61                            | 776                                    | 0.001 | 61.00  | 0.08  | 1.000 | 0.99999 |
| 4431              | 1                    | 0.75                        | 1                     | 45                            | 1,386                                  | 0.001 | 45.00  | 0.03  | 1.000 | 0.99999 |
| 4432              | 6                    | 7.65                        | 71                    | 5,941                         | 462                                    | 0.154 | 83.68  | 12.86 | 1.000 | 0.99971 |
| 4602              | 2                    | 4.99                        | 69                    | 6,162                         | 948                                    | 0.073 | 89.30  | 6.50  | 1.000 | 0.99985 |
| 4714              | 1                    | 0.77                        | 1                     | 46                            | 329                                    | 0.003 | 46.00  | 0.14  | 1.000 | 0.99999 |
| 5603              | 2                    | 1.50                        | 28                    | 1,550                         | 1,288                                  | 0.022 | 55.36  | 1.20  | 1.000 | 0.99997 |
| 5902              | 1                    | 2.15                        | 13                    | 1,678                         | 1,012                                  | 0.013 | 129.08 | 1.66  | 1.000 | 0.99996 |
| 5905              | 5                    | 10.52                       | 61                    | 5,039                         | 1,875                                  | 0.033 | 82.61  | 2.69  | 1.017 | 0.99994 |
| 6021              | 2                    | 1.68                        | 69                    | 3,939                         | 1,275                                  | 0.054 | 57.09  | 3.09  | 1.015 | 0.99993 |
| 6024              | 1                    | 5.43                        | 1                     | 326                           | 393                                    | 0.003 | 326.00 | 0.83  | 1.000 | 0.99998 |
|                   | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL<br>CUSTOMERS<br>SERVED           | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
| Total:            | 214                  | 298.40                      | 9,297                 | 564,331                       | 164,879                                | 0.056 | 60.70  | 3.42  | 1.016 | 0.99992 |

**THE EMPIRE DISTRICT ELECTRIC COMPANY**  
**CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI**  
1/1/2017 to 1/31/2017  
EXCLUDING MAJOR EVENT DAYS

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 1050              | 3                    | 7.21                        | 145                   | 21,899                        | 1,597                                  | 0.091 | 151.03 | 13.71 | 1.051 | 0.99969 |
| 1052              | 1                    | 5.65                        | 1                     | 339                           | 1,162                                  | 0.001 | 339.00 | 0.29  | 1.000 | 0.99999 |
| 1082              | 5                    | 5.13                        | 5                     | 308                           | 1,330                                  | 0.004 | 61.60  | 0.23  | 1.000 | 0.99999 |
| 1091              | 3                    | 3.27                        | 3                     | 196                           | 716                                    | 0.004 | 65.33  | 0.27  | 1.000 | 0.99999 |
| 1094              | 1                    | 1.08                        | 23                    | 1,501                         | 1,237                                  | 0.019 | 65.26  | 1.21  | 1.000 | 0.99997 |
| 1211              | 7                    | 10.61                       | 73                    | 6,614                         | 1,479                                  | 0.049 | 90.60  | 4.47  | 3.174 | 0.99990 |
| 1212              | 1                    | 1.32                        | 3                     | 237                           | 332                                    | 0.009 | 79.00  | 0.71  | 1.000 | 0.99998 |
| 1213              | 2                    | 1.90                        | 2                     | 114                           | 554                                    | 0.004 | 57.00  | 0.21  | 1.000 | 0.99999 |
| 1230              | 1                    | 3.35                        | 70                    | 14,072                        | 1,179                                  | 0.059 | 201.03 | 11.94 | 1.000 | 0.99973 |
| 1232              | 1                    | 0.82                        | 13                    | 640                           | 1,183                                  | 0.011 | 49.23  | 0.54  | 1.000 | 0.99999 |
| 1241              | 1                    | 0.57                        | 7                     | 238                           | 853                                    | 0.008 | 34.00  | 0.28  | 1.000 | 0.99999 |
| 1261              | 1                    | 0.62                        | 1                     | 37                            | 397                                    | 0.003 | 37.00  | 0.09  | 1.000 | 0.99999 |
| 1263              | 1                    | 2.07                        | 1                     | 124                           | 1,132                                  | 0.001 | 124.00 | 0.11  | 1.000 | 0.99999 |
| 1265              | 1                    | 0.65                        | 1                     | 39                            | 1,282                                  | 0.001 | 39.00  | 0.03  | 1.000 | 0.99999 |
| 1273              | 4                    | 2.35                        | 4                     | 141                           | 865                                    | 0.005 | 35.25  | 0.16  | 1.000 | 0.99999 |
| 1282              | 1                    | 0.62                        | 93                    | 3,524                         | 1,035                                  | 0.090 | 37.89  | 3.40  | 1.000 | 0.99992 |
| 1284              | 3                    | 3.52                        | 116                   | 7,271                         | 948                                    | 0.122 | 62.68  | 7.67  | 1.303 | 0.99983 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 1312              | 1                    | 1.32                        | 1                     | 79                            | 934                                    | 0.001 | 79.00  | 0.08   | 1.000 | 0.99999 |
| 1454              | 1                    | 0.92                        | 1                     | 55                            | 935                                    | 0.001 | 55.00  | 0.06   | 1.000 | 0.99999 |
| 1455              | 1                    | 2.25                        | 1                     | 135                           | 389                                    | 0.003 | 135.00 | 0.35   | 1.000 | 0.99999 |
| 1523              | 2                    | 1.93                        | 9                     | 662                           | 723                                    | 0.012 | 73.56  | 0.92   | 1.000 | 0.99998 |
| 1842              | 1                    | 1.45                        | 1                     | 87                            | 280                                    | 0.004 | 87.00  | 0.31   | 1.000 | 0.99999 |
| 1843              | 2                    | 2.12                        | 26                    | 1,665                         | 1,085                                  | 0.024 | 64.04  | 1.53   | 1.000 | 0.99997 |
| 2091              | 1                    | 2.07                        | 1                     | 124                           | 879                                    | 0.001 | 124.00 | 0.14   | 1.000 | 0.99999 |
| 2171              | 1                    | 0.80                        | 1                     | 48                            | 564                                    | 0.002 | 48.00  | 0.09   | 1.000 | 0.99999 |
| 2211              | 6                    | 6.39                        | 6                     | 383                           | 723                                    | 0.008 | 63.83  | 0.53   | 1.000 | 0.99999 |
| 2511              | 3                    | 7.34                        | 660                   | 67,901                        | 618                                    | 1.068 | 102.88 | 109.87 | 1.068 | 0.99754 |
| 2621              | 3                    | 4.47                        | 14                    | 1,670                         | 1,166                                  | 0.012 | 119.29 | 1.43   | 1.077 | 0.99997 |
| 2921              | 11                   | 22.78                       | 92                    | 11,348                        | 375                                    | 0.245 | 123.35 | 30.26  | 1.057 | 0.99932 |
| 2951              | 2                    | 1.94                        | 26                    | 1,520                         | 1,395                                  | 0.019 | 58.46  | 1.09   | 1.000 | 0.99998 |
| 2961              | 1                    | 0.40                        | 1                     | 24                            | 648                                    | 0.002 | 24.00  | 0.04   | 1.000 | 0.99999 |
| 3122              | 2                    | 3.22                        | 4                     | 537                           | 849                                    | 0.005 | 134.25 | 0.63   | 1.000 | 0.99999 |
| 3181              | 1                    | 1.37                        | 55                    | 4,535                         | 724                                    | 0.076 | 82.45  | 6.26   | 1.000 | 0.99986 |
| 3232              | 1                    | 0.98                        | 1                     | 59                            | 431                                    | 0.002 | 59.00  | 0.14   | 1.000 | 0.99999 |
| 3314              | 2                    | 3.91                        | 220                   | 29,527                        | 222                                    | 0.991 | 134.21 | 133.00 | 1.005 | 0.99702 |
| 3315              | 1                    | 0.88                        | 13                    | 695                           | 1,578                                  | 0.008 | 53.46  | 0.44   | 1.000 | 0.99999 |
| 3422              | 3                    | 9.55                        | 8                     | 1,677                         | 971                                    | 0.008 | 209.63 | 1.73   | 1.000 | 0.99996 |
| 3423              | 1                    | 1.12                        | 1                     | 67                            | 386                                    | 0.003 | 67.00  | 0.17   | 1.000 | 0.99999 |
| 3472              | 2                    | 1.21                        | 4                     | 115                           | 1,579                                  | 0.003 | 28.75  | 0.07   | 1.333 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 3553              | 2                    | 2.24                        | 33                    | 1,298                         | 1,041                                  | 0.032 | 39.33  | 1.25  | 1.000 | 0.99997 |
| 3592              | 1                    | 0.88                        | 1                     | 53                            | 1,741                                  | 0.001 | 53.00  | 0.03  | 1.000 | 0.99999 |
| 3621              | 1                    | 0.68                        | 1                     | 41                            | 1,558                                  | 0.001 | 41.00  | 0.03  | 1.000 | 0.99999 |
| 3661              | 3                    | 3.18                        | 12                    | 887                           | 1,027                                  | 0.012 | 73.92  | 0.86  | 1.000 | 0.99998 |
| 3662              | 2                    | 1.80                        | 779                   | 3,968                         | 778                                    | 1.001 | 5.09   | 5.10  | 1.001 | 0.99989 |
| 3663              | 1                    | 0.93                        | 1                     | 56                            | 795                                    | 0.001 | 56.00  | 0.07  | 1.000 | 0.99999 |
| 3673              | 1                    | 0.80                        | 10                    | 486                           | 267                                    | 0.037 | 48.60  | 1.82  | 1.000 | 0.99996 |
| 3691              | 1                    | 1.32                        | 49                    | 3,905                         | 1,163                                  | 0.042 | 79.69  | 3.36  | 1.000 | 0.99992 |
| 3692              | 1                    | 2.35                        | 19                    | 2,681                         | 410                                    | 0.046 | 141.11 | 6.54  | 1.000 | 0.99985 |
| 3694              | 2                    | 5.12                        | 11                    | 2,528                         | 1,328                                  | 0.008 | 229.82 | 1.90  | 1.000 | 0.99996 |
| 3702              | 1                    | 0.87                        | 1                     | 52                            | 611                                    | 0.002 | 52.00  | 0.09  | 1.000 | 0.99999 |
| 3751              | 20                   | 17.66                       | 373                   | 20,636                        | 881                                    | 0.423 | 55.32  | 23.42 | 1.028 | 0.99948 |
| 3872              | 1                    | 0.78                        | 1                     | 47                            | 1,067                                  | 0.001 | 47.00  | 0.04  | 1.000 | 0.99999 |
| 3893              | 4                    | 5.63                        | 53                    | 4,572                         | 1,111                                  | 0.048 | 86.26  | 4.12  | 1.019 | 0.99991 |
| 3901              | 1                    | 1.13                        | 45                    | 3,069                         | 877                                    | 0.051 | 68.20  | 3.50  | 1.000 | 0.99992 |
| 3912              | 1                    | 5.90                        | 9                     | 3,186                         | 1,160                                  | 0.008 | 354.00 | 2.75  | 1.000 | 0.99994 |
| 3913              | 2                    | 2.31                        | 809                   | 33,284                        | 809                                    | 1.000 | 41.14  | 41.14 | 1.002 | 0.99908 |
| 3951              | 3                    | 5.45                        | 87                    | 7,621                         | 928                                    | 0.094 | 87.60  | 8.21  | 1.024 | 0.99982 |
| 3952              | 3                    | 4.98                        | 16                    | 2,517                         | 1,273                                  | 0.013 | 157.31 | 1.98  | 1.143 | 0.99996 |
| 3953              | 4                    | 2.66                        | 4                     | 160                           | 522                                    | 0.008 | 40.00  | 0.31  | 2.000 | 0.99999 |
| 3981              | 2                    | 2.18                        | 21                    | 1,371                         | 1,503                                  | 0.014 | 65.29  | 0.91  | 1.000 | 0.99998 |
| 3982              | 2                    | 1.17                        | 53                    | 2,404                         | 1,765                                  | 0.030 | 45.36  | 1.36  | 1.000 | 0.99997 |



| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 3991              | 1                    | 0.65                        | 37                    | 1,443                         | 726                                    | 0.051 | 39.00  | 1.99  | 1.000 | 0.99996 |
| 3992              | 1                    | 0.53                        | 22                    | 714                           | 166                                    | 0.133 | 32.45  | 4.30  | 1.000 | 0.99990 |
| 4091              | 3                    | 8.56                        | 19                    | 1,718                         | 1,148                                  | 0.017 | 90.42  | 1.50  | 1.000 | 0.99997 |
| 4092              | 3                    | 5.18                        | 3                     | 311                           | 434                                    | 0.007 | 103.67 | 0.72  | 1.000 | 0.99998 |
| 4101              | 1                    | 0.60                        | 1                     | 36                            | 588                                    | 0.002 | 36.00  | 0.06  | 1.000 | 0.99999 |
| 4134              | 2                    | 1.77                        | 16                    | 1,268                         | 835                                    | 0.019 | 79.25  | 1.52  | 1.000 | 0.99997 |
| 4136              | 1                    | 2.57                        | 1                     | 154                           | 669                                    | 0.001 | 154.00 | 0.23  | 1.000 | 0.99999 |
| 4137              | 1                    | 2.58                        | 1                     | 155                           | 794                                    | 0.001 | 155.00 | 0.20  | 1.000 | 0.99999 |
| 4138              | 2                    | 2.18                        | 46                    | 2,692                         | 745                                    | 0.062 | 58.52  | 3.61  | 1.000 | 0.99992 |
| 4141              | 1                    | 1.55                        | 1                     | 93                            | 82                                     | 0.012 | 93.00  | 1.13  | 1.000 | 0.99997 |
| 4142              | 2                    | 1.39                        | 50                    | 2,038                         | 597                                    | 0.084 | 40.76  | 3.41  | 1.020 | 0.99992 |
| 4151              | 1                    | 1.35                        | 852                   | 69,012                        | 1,246                                  | 0.684 | 81.00  | 55.39 | 1.000 | 0.99876 |
| 4154              | 2                    | 2.35                        | 134                   | 11,737                        | 1,209                                  | 0.111 | 87.59  | 9.71  | 1.000 | 0.99978 |
| 4155              | 1                    | 2.00                        | 8                     | 960                           | 2,133                                  | 0.004 | 120.00 | 0.45  | 1.000 | 0.99999 |
| 4172              | 2                    | 2.33                        | 1,726                 | 98,662                        | 1,724                                  | 1.001 | 57.16  | 57.23 | 1.002 | 0.99872 |
| 4173              | 1                    | 0.57                        | 1,780                 | 61,831                        | 634                                    | 2.808 | 34.74  | 97.53 | 1.000 | 0.99782 |
| 4181              | 1                    | 3.17                        | 1                     | 190                           | 492                                    | 0.002 | 190.00 | 0.39  | 1.000 | 0.99999 |
| 4212              | 4                    | 7.90                        | 38                    | 4,449                         | 818                                    | 0.046 | 117.08 | 5.44  | 1.027 | 0.99988 |
| 4223              | 1                    | 1.05                        | 1                     | 63                            | 826                                    | 0.001 | 63.00  | 0.08  | 1.000 | 0.99999 |
| 4224              | 3                    | 2.65                        | 65                    | 3,234                         | 753                                    | 0.086 | 49.75  | 4.29  | 1.102 | 0.99990 |
| 4311              | 1                    | 2.35                        | 1                     | 141                           | 791                                    | 0.001 | 141.00 | 0.18  | 1.000 | 0.99999 |
| 4324              | 2                    | 0.71                        | 2                     | 43                            | 1,253                                  | 0.002 | 21.50  | 0.03  | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 4341              | 1                    | 0.58                        | 27                    | 964                           | 1,783                                  | 0.015 | 35.70  | 0.54  | 1.000 | 0.99999 |
| 4343              | 5                    | 3.74                        | 20                    | 1,096                         | 1,025                                  | 0.020 | 54.80  | 1.07  | 1.111 | 0.99998 |
| 4362              | 1                    | 0.80                        | 1                     | 48                            | 828                                    | 0.001 | 48.00  | 0.06  | 1.000 | 0.99999 |
| 4363              | 1                    | 0.43                        | 26                    | 682                           | 1,662                                  | 0.016 | 26.23  | 0.41  | 1.000 | 0.99999 |
| 4371              | 1                    | 1.60                        | 1                     | 96                            | 1,543                                  | 0.001 | 96.00  | 0.06  | 1.000 | 0.99999 |
| 4372              | 1                    | 1.62                        | 7                     | 685                           | 440                                    | 0.016 | 97.86  | 1.56  | 1.000 | 0.99997 |
| 4373              | 1                    | 1.02                        | 1                     | 61                            | 776                                    | 0.001 | 61.00  | 0.08  | 1.000 | 0.99999 |
| 4431              | 1                    | 0.75                        | 1                     | 45                            | 1,386                                  | 0.001 | 45.00  | 0.03  | 1.000 | 0.99999 |
| 4432              | 6                    | 7.65                        | 71                    | 5,941                         | 462                                    | 0.154 | 83.68  | 12.86 | 1.000 | 0.99971 |
| 4602              | 2                    | 4.99                        | 69                    | 6,162                         | 948                                    | 0.073 | 89.30  | 6.50  | 1.000 | 0.99985 |
| 4714              | 1                    | 0.77                        | 1                     | 46                            | 329                                    | 0.003 | 46.00  | 0.14  | 1.000 | 0.99999 |
| 5603              | 2                    | 1.50                        | 28                    | 1,550                         | 1,288                                  | 0.022 | 55.36  | 1.20  | 1.000 | 0.99997 |
| 5902              | 1                    | 2.15                        | 13                    | 1,678                         | 1,012                                  | 0.013 | 129.08 | 1.66  | 1.000 | 0.99996 |
| 5905              | 5                    | 10.52                       | 61                    | 5,039                         | 1,875                                  | 0.033 | 82.61  | 2.69  | 1.017 | 0.99994 |
| 6021              | 2                    | 1.68                        | 69                    | 3,939                         | 1,275                                  | 0.054 | 57.09  | 3.09  | 1.015 | 0.99993 |
| 6024              | 1                    | 5.43                        | 1                     | 326                           | 393                                    | 0.003 | 326.00 | 0.83  | 1.000 | 0.99998 |
|                   | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL<br>CUSTOMERS<br>SERVED           | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
| Total:            | 214                  | 298.40                      | 9,297                 | 564,331                       | 164,879                                | 0.056 | 60.70  | 3.42  | 1.016 | 0.99992 |

**THE EMPIRE DISTRICT ELECTRIC COMPANY**  
**CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI**  
*2/1/2017 to 2/28/2017*  
 INCLUDING MAJOR EVENT DAYS

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 1050              | 1                    | 1.17                        | 1                     | 70                            | 1,597                                  | 0.001 | 70.00  | 0.04  | 1.000 | 0.99999 |
| 1082              | 1                    | 2.35                        | 1                     | 141                           | 1,330                                  | 0.001 | 141.00 | 0.11  | 1.000 | 0.99999 |
| 1091              | 1                    | 1.50                        | 1                     | 90                            | 716                                    | 0.001 | 90.00  | 0.13  | 1.000 | 0.99999 |
| 1092              | 2                    | 2.53                        | 82                    | 6,265                         | 971                                    | 0.084 | 76.40  | 6.45  | 1.079 | 0.99984 |
| 1141              | 1                    | 1.80                        | 38                    | 4,104                         | 902                                    | 0.042 | 108.00 | 4.55  | 1.000 | 0.99989 |
| 1211              | 2                    | 2.37                        | 2                     | 142                           | 1,479                                  | 0.001 | 71.00  | 0.10  | 1.000 | 0.99999 |
| 1241              | 1                    | 0.98                        | 13                    | 772                           | 853                                    | 0.015 | 59.38  | 0.91  | 1.000 | 0.99998 |
| 1243              | 4                    | 24.95                       | 1,208                 | 95,469                        | 1,199                                  | 1.008 | 79.03  | 79.62 | 1.011 | 0.99803 |
| 1271              | 1                    | 1.28                        | 7                     | 544                           | 962                                    | 0.007 | 77.71  | 0.57  | 1.000 | 0.99999 |
| 1284              | 1                    | 1.02                        | 1                     | 61                            | 948                                    | 0.001 | 61.00  | 0.06  | 1.000 | 0.99999 |
| 1285              | 1                    | 4.08                        | 61                    | 14,993                        | 1,094                                  | 0.056 | 245.79 | 13.70 | 1.000 | 0.99966 |
| 1311              | 1                    | 1.07                        | 1                     | 64                            | 272                                    | 0.004 | 64.00  | 0.24  | 1.000 | 0.99999 |
| 1451              | 2                    | 3.70                        | 296                   | 37,954                        | 526                                    | 0.563 | 128.22 | 72.16 | 1.031 | 0.99821 |
| 1453              | 3                    | 1.85                        | 9                     | 279                           | 1,797                                  | 0.005 | 31.00  | 0.16  | 1.286 | 0.99999 |
| 2621              | 1                    | 0.40                        | 381                   | 9,283                         | 1,166                                  | 0.327 | 24.36  | 7.96  | 1.000 | 0.99980 |
| 2961              | 1                    | 3.50                        | 40                    | 8,438                         | 648                                    | 0.062 | 210.95 | 13.02 | 1.000 | 0.99968 |
| 3122              | 4                    | 4.86                        | 91                    | 7,309                         | 849                                    | 0.107 | 80.32  | 8.61  | 1.338 | 0.99979 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 3221              | 2                    | 3.80                        | 1,242                 | 94,407                        | 1,241                                  | 1.001 | 76.01  | 76.07 | 1.001 | 0.99811 |
| 3302              | 2                    | 1.73                        | 2                     | 104                           | 899                                    | 0.002 | 52.00  | 0.12  | 1.000 | 0.99999 |
| 3303              | 1                    | 0.93                        | 4                     | 225                           | 979                                    | 0.004 | 56.25  | 0.23  | 1.000 | 0.99999 |
| 3472              | 1                    | 0.50                        | 33                    | 998                           | 1,579                                  | 0.021 | 30.24  | 0.63  | 1.000 | 0.99998 |
| 3553              | 2                    | 2.45                        | 2                     | 147                           | 1,041                                  | 0.002 | 73.50  | 0.14  | 1.000 | 0.99999 |
| 3592              | 2                    | 2.83                        | 9                     | 441                           | 1,741                                  | 0.005 | 49.00  | 0.25  | 1.125 | 0.99999 |
| 3663              | 2                    | 1.90                        | 61                    | 3,758                         | 795                                    | 0.077 | 61.61  | 4.73  | 1.017 | 0.99988 |
| 3693              | 1                    | 1.28                        | 26                    | 2,014                         | 186                                    | 0.140 | 77.46  | 10.83 | 1.000 | 0.99973 |
| 3751              | 1                    | 0.62                        | 1                     | 37                            | 881                                    | 0.001 | 37.00  | 0.04  | 1.000 | 0.99999 |
| 3872              | 1                    | 2.65                        | 1                     | 159                           | 1,067                                  | 0.001 | 159.00 | 0.15  | 1.000 | 0.99999 |
| 3891              | 1                    | 2.00                        | 1                     | 120                           | 454                                    | 0.002 | 120.00 | 0.26  | 1.000 | 0.99999 |
| 3893              | 1                    | 1.93                        | 1                     | 116                           | 1,111                                  | 0.001 | 116.00 | 0.10  | 1.000 | 0.99999 |
| 3901              | 1                    | 0.87                        | 1                     | 52                            | 877                                    | 0.001 | 52.00  | 0.06  | 1.000 | 0.99999 |
| 3914              | 1                    | 1.52                        | 84                    | 7,674                         | 373                                    | 0.225 | 91.36  | 20.57 | 1.000 | 0.99949 |
| 3951              | 2                    | 2.87                        | 25                    | 1,832                         | 928                                    | 0.027 | 73.28  | 1.97  | 1.042 | 0.99995 |
| 3971              | 1                    | 0.95                        | 8                     | 463                           | 665                                    | 0.012 | 57.88  | 0.70  | 1.000 | 0.99998 |
| 3981              | 1                    | 0.53                        | 1                     | 32                            | 1,503                                  | 0.001 | 32.00  | 0.02  | 1.000 | 0.99999 |
| 3982              | 3                    | 1.00                        | 113                   | 2,713                         | 1,765                                  | 0.064 | 24.01  | 1.54  | 1.009 | 0.99996 |
| 3991              | 1                    | 1.05                        | 1                     | 63                            | 726                                    | 0.001 | 63.00  | 0.09  | 1.000 | 0.99999 |
| 3992              | 1                    | 1.22                        | 22                    | 1,621                         | 166                                    | 0.133 | 73.68  | 9.77  | 1.000 | 0.99976 |
| 4031              | 1                    | 3.40                        | 1                     | 204                           | 704                                    | 0.001 | 204.00 | 0.29  | 1.000 | 0.99999 |
| 4102              | 2                    | 2.17                        | 93                    | 7,838                         | 903                                    | 0.103 | 84.28  | 8.68  | 1.000 | 0.99978 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 4138              | 1                    | 1.18                        | 1                     | 71                            | 745                                    | 0.001 | 71.00  | 0.10  | 1.000 | 0.99999 |
| 4151              | 4                    | 4.63                        | 39                    | 1,998                         | 1,246                                  | 0.031 | 51.23  | 1.60  | 1.026 | 0.99996 |
| 4152              | 3                    | 1.86                        | 3                     | 112                           | 822                                    | 0.004 | 37.33  | 0.14  | 1.000 | 0.99999 |
| 4154              | 1                    | 3.25                        | 1                     | 195                           | 1,209                                  | 0.001 | 195.00 | 0.16  | 1.000 | 0.99999 |
| 4222              | 1                    | 0.58                        | 1                     | 35                            | 1,044                                  | 0.001 | 35.00  | 0.03  | 1.000 | 0.99999 |
| 4302              | 1                    | 3.60                        | 11                    | 2,379                         | 651                                    | 0.017 | 216.27 | 3.65  | 1.000 | 0.99991 |
| 4341              | 1                    | 0.80                        | 48                    | 2,344                         | 1,783                                  | 0.027 | 48.83  | 1.31  | 1.000 | 0.99997 |
| 4361              | 1                    | 0.65                        | 1                     | 39                            | 797                                    | 0.001 | 39.00  | 0.05  | 1.000 | 0.99999 |
| 4362              | 1                    | 0.57                        | 55                    | 1,903                         | 828                                    | 0.066 | 34.60  | 2.30  | 1.000 | 0.99994 |
| 4363              | 1                    | 0.72                        | 21                    | 903                           | 1,662                                  | 0.013 | 43.00  | 0.54  | 1.000 | 0.99999 |
| 4371              | 1                    | 0.60                        | 1                     | 36                            | 1,543                                  | 0.001 | 36.00  | 0.02  | 1.000 | 0.99999 |
| 4373              | 1                    | 1.03                        | 48                    | 3,012                         | 776                                    | 0.062 | 62.75  | 3.88  | 1.000 | 0.99990 |
| 4385              | 1                    | 1.07                        | 1                     | 64                            | 1,122                                  | 0.001 | 64.00  | 0.06  | 1.000 | 0.99999 |
| 4386              | 2                    | 4.47                        | 289                   | 42,868                        | 1,653                                  | 0.175 | 148.33 | 25.93 | 1.003 | 0.99936 |
| 4431              | 1                    | 0.98                        | 1                     | 59                            | 1,386                                  | 0.001 | 59.00  | 0.04  | 1.000 | 0.99999 |
| 4602              | 3                    | 2.63                        | 193                   | 10,353                        | 948                                    | 0.204 | 53.64  | 10.92 | 1.000 | 0.99973 |
| 5601              | 1                    | 2.27                        | 3                     | 410                           | 1,164                                  | 0.003 | 136.67 | 0.35  | 1.000 | 0.99999 |
| 5602              | 1                    | 2.67                        | 3                     | 480                           | 681                                    | 0.004 | 160.00 | 0.70  | 1.000 | 0.99998 |
| 5603              | 4                    | 6.38                        | 20                    | 866                           | 1,288                                  | 0.016 | 43.30  | 0.67  | 1.000 | 0.99998 |
| 5904              | 1                    | 1.35                        | 41                    | 3,349                         | 1,223                                  | 0.034 | 81.68  | 2.74  | 1.000 | 0.99993 |
| 5905              | 3                    | 3.12                        | 3                     | 187                           | 1,875                                  | 0.002 | 62.33  | 0.10  | 1.000 | 0.99999 |
| 6021              | 2                    | 2.10                        | 6                     | 319                           | 1,275                                  | 0.005 | 53.17  | 0.25  | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|-------|-------|-------|---------|
|                   | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL<br>CUSTOMERS<br>SERVED           | SAIFI | CAIDI | SAIDI | CAIFI | ASAI    |
| Total:            | 95                   | 144.12                      | 4,755                 | 382,978                       | 164,879                                | 0.029 | 80.54 | 2.32  | 1.013 | 0.99994 |

**THE EMPIRE DISTRICT ELECTRIC COMPANY**  
**CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI**  
*2/1/2017 to 2/28/2017*  
 EXCLUDING MAJOR EVENT DAYS

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 1050              | 1                    | 1.17                        | 1                     | 70                            | 1,597                                  | 0.001 | 70.00  | 0.04  | 1.000 | 0.99999 |
| 1082              | 1                    | 2.35                        | 1                     | 141                           | 1,330                                  | 0.001 | 141.00 | 0.11  | 1.000 | 0.99999 |
| 1091              | 1                    | 1.50                        | 1                     | 90                            | 716                                    | 0.001 | 90.00  | 0.13  | 1.000 | 0.99999 |
| 1092              | 2                    | 2.53                        | 82                    | 6,265                         | 971                                    | 0.084 | 76.40  | 6.45  | 1.079 | 0.99984 |
| 1141              | 1                    | 1.80                        | 38                    | 4,104                         | 902                                    | 0.042 | 108.00 | 4.55  | 1.000 | 0.99989 |
| 1211              | 2                    | 2.37                        | 2                     | 142                           | 1,479                                  | 0.001 | 71.00  | 0.10  | 1.000 | 0.99999 |
| 1241              | 1                    | 0.98                        | 13                    | 772                           | 853                                    | 0.015 | 59.38  | 0.91  | 1.000 | 0.99998 |
| 1243              | 4                    | 24.95                       | 1,208                 | 95,469                        | 1,199                                  | 1.008 | 79.03  | 79.62 | 1.011 | 0.99803 |
| 1271              | 1                    | 1.28                        | 7                     | 544                           | 962                                    | 0.007 | 77.71  | 0.57  | 1.000 | 0.99999 |
| 1284              | 1                    | 1.02                        | 1                     | 61                            | 948                                    | 0.001 | 61.00  | 0.06  | 1.000 | 0.99999 |
| 1285              | 1                    | 4.08                        | 61                    | 14,993                        | 1,094                                  | 0.056 | 245.79 | 13.70 | 1.000 | 0.99966 |
| 1311              | 1                    | 1.07                        | 1                     | 64                            | 272                                    | 0.004 | 64.00  | 0.24  | 1.000 | 0.99999 |
| 1451              | 2                    | 3.70                        | 296                   | 37,954                        | 526                                    | 0.563 | 128.22 | 72.16 | 1.031 | 0.99821 |
| 1453              | 3                    | 1.85                        | 9                     | 279                           | 1,797                                  | 0.005 | 31.00  | 0.16  | 1.286 | 0.99999 |
| 2621              | 1                    | 0.40                        | 381                   | 9,283                         | 1,166                                  | 0.327 | 24.36  | 7.96  | 1.000 | 0.99980 |
| 2961              | 1                    | 3.50                        | 40                    | 8,438                         | 648                                    | 0.062 | 210.95 | 13.02 | 1.000 | 0.99968 |
| 3122              | 4                    | 4.86                        | 91                    | 7,309                         | 849                                    | 0.107 | 80.32  | 8.61  | 1.338 | 0.99979 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 3221              | 2                    | 3.80                        | 1,242                 | 94,407                        | 1,241                                  | 1.001 | 76.01  | 76.07 | 1.001 | 0.99811 |
| 3302              | 2                    | 1.73                        | 2                     | 104                           | 899                                    | 0.002 | 52.00  | 0.12  | 1.000 | 0.99999 |
| 3303              | 1                    | 0.93                        | 4                     | 225                           | 979                                    | 0.004 | 56.25  | 0.23  | 1.000 | 0.99999 |
| 3472              | 1                    | 0.50                        | 33                    | 998                           | 1,579                                  | 0.021 | 30.24  | 0.63  | 1.000 | 0.99998 |
| 3553              | 2                    | 2.45                        | 2                     | 147                           | 1,041                                  | 0.002 | 73.50  | 0.14  | 1.000 | 0.99999 |
| 3592              | 2                    | 2.83                        | 9                     | 441                           | 1,741                                  | 0.005 | 49.00  | 0.25  | 1.125 | 0.99999 |
| 3663              | 2                    | 1.90                        | 61                    | 3,758                         | 795                                    | 0.077 | 61.61  | 4.73  | 1.017 | 0.99988 |
| 3693              | 1                    | 1.28                        | 26                    | 2,014                         | 186                                    | 0.140 | 77.46  | 10.83 | 1.000 | 0.99973 |
| 3751              | 1                    | 0.62                        | 1                     | 37                            | 881                                    | 0.001 | 37.00  | 0.04  | 1.000 | 0.99999 |
| 3872              | 1                    | 2.65                        | 1                     | 159                           | 1,067                                  | 0.001 | 159.00 | 0.15  | 1.000 | 0.99999 |
| 3891              | 1                    | 2.00                        | 1                     | 120                           | 454                                    | 0.002 | 120.00 | 0.26  | 1.000 | 0.99999 |
| 3893              | 1                    | 1.93                        | 1                     | 116                           | 1,111                                  | 0.001 | 116.00 | 0.10  | 1.000 | 0.99999 |
| 3901              | 1                    | 0.87                        | 1                     | 52                            | 877                                    | 0.001 | 52.00  | 0.06  | 1.000 | 0.99999 |
| 3914              | 1                    | 1.52                        | 84                    | 7,674                         | 373                                    | 0.225 | 91.36  | 20.57 | 1.000 | 0.99949 |
| 3951              | 2                    | 2.87                        | 25                    | 1,832                         | 928                                    | 0.027 | 73.28  | 1.97  | 1.042 | 0.99995 |
| 3971              | 1                    | 0.95                        | 8                     | 463                           | 665                                    | 0.012 | 57.88  | 0.70  | 1.000 | 0.99998 |
| 3981              | 1                    | 0.53                        | 1                     | 32                            | 1,503                                  | 0.001 | 32.00  | 0.02  | 1.000 | 0.99999 |
| 3982              | 3                    | 1.00                        | 113                   | 2,713                         | 1,765                                  | 0.064 | 24.01  | 1.54  | 1.009 | 0.99996 |
| 3991              | 1                    | 1.05                        | 1                     | 63                            | 726                                    | 0.001 | 63.00  | 0.09  | 1.000 | 0.99999 |
| 3992              | 1                    | 1.22                        | 22                    | 1,621                         | 166                                    | 0.133 | 73.68  | 9.77  | 1.000 | 0.99976 |
| 4031              | 1                    | 3.40                        | 1                     | 204                           | 704                                    | 0.001 | 204.00 | 0.29  | 1.000 | 0.99999 |
| 4102              | 2                    | 2.17                        | 93                    | 7,838                         | 903                                    | 0.103 | 84.28  | 8.68  | 1.000 | 0.99978 |



| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 4138              | 1                    | 1.18                        | 1                     | 71                            | 745                                    | 0.001 | 71.00  | 0.10  | 1.000 | 0.99999 |
| 4151              | 4                    | 4.63                        | 39                    | 1,998                         | 1,246                                  | 0.031 | 51.23  | 1.60  | 1.026 | 0.99996 |
| 4152              | 3                    | 1.86                        | 3                     | 112                           | 822                                    | 0.004 | 37.33  | 0.14  | 1.000 | 0.99999 |
| 4154              | 1                    | 3.25                        | 1                     | 195                           | 1,209                                  | 0.001 | 195.00 | 0.16  | 1.000 | 0.99999 |
| 4222              | 1                    | 0.58                        | 1                     | 35                            | 1,044                                  | 0.001 | 35.00  | 0.03  | 1.000 | 0.99999 |
| 4302              | 1                    | 3.60                        | 11                    | 2,379                         | 651                                    | 0.017 | 216.27 | 3.65  | 1.000 | 0.99991 |
| 4341              | 1                    | 0.80                        | 48                    | 2,344                         | 1,783                                  | 0.027 | 48.83  | 1.31  | 1.000 | 0.99997 |
| 4361              | 1                    | 0.65                        | 1                     | 39                            | 797                                    | 0.001 | 39.00  | 0.05  | 1.000 | 0.99999 |
| 4362              | 1                    | 0.57                        | 55                    | 1,903                         | 828                                    | 0.066 | 34.60  | 2.30  | 1.000 | 0.99994 |
| 4363              | 1                    | 0.72                        | 21                    | 903                           | 1,662                                  | 0.013 | 43.00  | 0.54  | 1.000 | 0.99999 |
| 4371              | 1                    | 0.60                        | 1                     | 36                            | 1,543                                  | 0.001 | 36.00  | 0.02  | 1.000 | 0.99999 |
| 4373              | 1                    | 1.03                        | 48                    | 3,012                         | 776                                    | 0.062 | 62.75  | 3.88  | 1.000 | 0.99990 |
| 4385              | 1                    | 1.07                        | 1                     | 64                            | 1,122                                  | 0.001 | 64.00  | 0.06  | 1.000 | 0.99999 |
| 4386              | 2                    | 4.47                        | 289                   | 42,868                        | 1,653                                  | 0.175 | 148.33 | 25.93 | 1.003 | 0.99936 |
| 4431              | 1                    | 0.98                        | 1                     | 59                            | 1,386                                  | 0.001 | 59.00  | 0.04  | 1.000 | 0.99999 |
| 4602              | 3                    | 2.63                        | 193                   | 10,353                        | 948                                    | 0.204 | 53.64  | 10.92 | 1.000 | 0.99973 |
| 5601              | 1                    | 2.27                        | 3                     | 410                           | 1,164                                  | 0.003 | 136.67 | 0.35  | 1.000 | 0.99999 |
| 5602              | 1                    | 2.67                        | 3                     | 480                           | 681                                    | 0.004 | 160.00 | 0.70  | 1.000 | 0.99998 |
| 5603              | 4                    | 6.38                        | 20                    | 866                           | 1,288                                  | 0.016 | 43.30  | 0.67  | 1.000 | 0.99998 |
| 5904              | 1                    | 1.35                        | 41                    | 3,349                         | 1,223                                  | 0.034 | 81.68  | 2.74  | 1.000 | 0.99993 |
| 5905              | 3                    | 3.12                        | 3                     | 187                           | 1,875                                  | 0.002 | 62.33  | 0.10  | 1.000 | 0.99999 |
| 6021              | 2                    | 2.10                        | 6                     | 319                           | 1,275                                  | 0.005 | 53.17  | 0.25  | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|-------|-------|-------|---------|
|                   | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL<br>CUSTOMERS<br>SERVED           | SAIFI | CAIDI | SAIDI | CAIFI | ASAI    |
| Total:            | 95                   | 144.12                      | 4,755                 | 382,978                       | 164,879                                | 0.029 | 80.54 | 2.32  | 1.013 | 0.99994 |

**THE EMPIRE DISTRICT ELECTRIC COMPANY**  
**CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI**  
3/1/2017 to 3/31/2017  
INCLUDING MAJOR EVENT DAYS

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 1052              | 4                    | 7.42                        | 1,209                 | 303,606                       | 1,160                                  | 1.042 | 251.12 | 261.73 | 1.043 | 0.99414 |
| 1082              | 7                    | 7.13                        | 250                   | 23,404                        | 1,330                                  | 0.188 | 93.62  | 17.60  | 1.068 | 0.99961 |
| 1091              | 2                    | 2.26                        | 717                   | 25,161                        | 704                                    | 1.018 | 35.09  | 35.74  | 1.001 | 0.99920 |
| 1092              | 1                    | 0.72                        | 7                     | 301                           | 971                                    | 0.007 | 43.00  | 0.31   | 1.000 | 0.99999 |
| 1093              | 1                    | 1.63                        | 1                     | 98                            | 239                                    | 0.004 | 98.00  | 0.41   | 1.000 | 0.99999 |
| 1101              | 3                    | 8.42                        | 82                    | 16,046                        | 570                                    | 0.144 | 195.68 | 28.15  | 1.025 | 0.99937 |
| 1102              | 3                    | 1.63                        | 495                   | 10,801                        | 465                                    | 1.065 | 21.82  | 23.23  | 1.065 | 0.99948 |
| 1141              | 1                    | 1.25                        | 1                     | 75                            | 902                                    | 0.001 | 75.00  | 0.08   | 1.000 | 0.99999 |
| 1142              | 1                    | 1.05                        | 1                     | 63                            | 214                                    | 0.005 | 63.00  | 0.29   | 1.000 | 0.99999 |
| 1211              | 3                    | 4.41                        | 3                     | 265                           | 1,479                                  | 0.002 | 88.33  | 0.18   | 1.000 | 0.99999 |
| 1212              | 3                    | 5.34                        | 7                     | 679                           | 332                                    | 0.021 | 97.00  | 2.05   | 1.000 | 0.99995 |
| 1213              | 1                    | 1.38                        | 1                     | 83                            | 554                                    | 0.002 | 83.00  | 0.15   | 1.000 | 0.99999 |
| 1232              | 2                    | 4.12                        | 48                    | 5,729                         | 1,183                                  | 0.041 | 119.35 | 4.84   | 1.000 | 0.99989 |
| 1241              | 4                    | 11.77                       | 60                    | 11,178                        | 853                                    | 0.070 | 186.30 | 13.10  | 1.395 | 0.99971 |
| 1242              | 2                    | 3.51                        | 36                    | 3,210                         | 680                                    | 0.053 | 89.17  | 4.72   | 1.000 | 0.99989 |
| 1263              | 1                    | 2.87                        | 7                     | 1,209                         | 1,135                                  | 0.006 | 172.71 | 1.07   | 1.000 | 0.99998 |
| 1264              | 1                    | 1.00                        | 1                     | 60                            | 18                                     | 0.056 | 60.00  | 3.33   | 1.000 | 0.99993 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 1282              | 1                    | 7.00                        | 1                     | 420                           | 864                                    | 0.001 | 420.00 | 0.49   | 1.000 | 0.99999 |
| 1283              | 1                    | 0.78                        | 1                     | 47                            | 370                                    | 0.003 | 47.00  | 0.13   | 1.000 | 0.99999 |
| 1284              | 1                    | 0.83                        | 1                     | 50                            | 948                                    | 0.001 | 50.00  | 0.05   | 1.000 | 0.99999 |
| 1285              | 1                    | 4.93                        | 180                   | 53,376                        | 1,094                                  | 0.165 | 296.53 | 48.79  | 1.000 | 0.99891 |
| 1311              | 5                    | 4.11                        | 5                     | 247                           | 272                                    | 0.018 | 49.40  | 0.91   | 1.000 | 0.99998 |
| 1453              | 1                    | 0.68                        | 43                    | 1,763                         | 1,797                                  | 0.024 | 41.00  | 0.98   | 1.000 | 0.99998 |
| 1521              | 1                    | 1.20                        | 1                     | 72                            | 361                                    | 0.003 | 72.00  | 0.20   | 1.000 | 0.99999 |
| 1522              | 1                    | 2.97                        | 1                     | 178                           | 102                                    | 0.010 | 178.00 | 1.75   | 1.000 | 0.99996 |
| 1523              | 6                    | 19.70                       | 14                    | 1,916                         | 723                                    | 0.019 | 136.86 | 2.65   | 1.000 | 0.99994 |
| 1841              | 1                    | 0.83                        | 1                     | 50                            | 650                                    | 0.002 | 50.00  | 0.08   | 1.000 | 0.99999 |
| 2051              | 2                    | 2.48                        | 2                     | 149                           | 165                                    | 0.012 | 74.50  | 0.90   | 1.000 | 0.99998 |
| 2172              | 1                    | 3.18                        | 1                     | 191                           | 224                                    | 0.004 | 191.00 | 0.85   | 1.000 | 0.99998 |
| 2211              | 2                    | 2.25                        | 743                   | 40,340                        | 723                                    | 1.028 | 54.29  | 55.80  | 1.028 | 0.99875 |
| 2212              | 3                    | 6.00                        | 1,288                 | 19,571                        | 1,295                                  | 0.995 | 15.19  | 15.11  | 1.002 | 0.99966 |
| 2492              | 1                    | 1.25                        | 29                    | 2,191                         | 29                                     | 1.000 | 75.55  | 75.55  | 1.000 | 0.99831 |
| 2511              | 2                    | 2.30                        | 619                   | 39,596                        | 618                                    | 1.002 | 63.97  | 64.07  | 1.002 | 0.99856 |
| 2621              | 3                    | 5.42                        | 25                    | 2,463                         | 1,166                                  | 0.021 | 98.52  | 2.11   | 1.000 | 0.99995 |
| 2622              | 2                    | 5.40                        | 14                    | 2,280                         | 113                                    | 0.124 | 162.86 | 20.18  | 1.000 | 0.99955 |
| 2921              | 1                    | 1.57                        | 375                   | 35,468                        | 375                                    | 1.000 | 94.58  | 94.58  | 1.000 | 0.99788 |
| 2951              | 2                    | 3.17                        | 14                    | 1,346                         | 1,395                                  | 0.010 | 96.14  | 0.96   | 1.000 | 0.99998 |
| 2961              | 2                    | 2.92                        | 653                   | 72,849                        | 648                                    | 1.008 | 111.56 | 112.42 | 1.014 | 0.99748 |
| 2962              | 1                    | 1.70                        | 257                   | 26,419                        | 257                                    | 1.000 | 102.80 | 102.80 | 1.000 | 0.99770 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 3082              | 5                    | 20.17                       | 353                   | 102,803                       | 322                                    | 1.096 | 291.23 | 319.26 | 1.096 | 0.99285 |
| 3121              | 4                    | 7.29                        | 1,142                 | 162,004                       | 1,131                                  | 1.010 | 141.86 | 143.24 | 2.555 | 0.99679 |
| 3122              | 28                   | 9.99                        | 969                   | 50,362                        | 849                                    | 1.141 | 51.97  | 59.32  | 1.141 | 0.99867 |
| 3181              | 4                    | 12.15                       | 727                   | 109,215                       | 724                                    | 1.004 | 150.23 | 150.85 | 1.004 | 0.99662 |
| 3221              | 3                    | 3.15                        | 150                   | 12,458                        | 1,241                                  | 0.121 | 83.05  | 10.04  | 1.007 | 0.99978 |
| 3222              | 20                   | 28.30                       | 45                    | 3,984                         | 770                                    | 0.058 | 88.53  | 5.17   | 1.098 | 0.99988 |
| 3232              | 1                    | 1.15                        | 12                    | 831                           | 429                                    | 0.028 | 69.25  | 1.94   | 1.000 | 0.99996 |
| 3301              | 1                    | 1.65                        | 196                   | 19,577                        | 196                                    | 1.000 | 99.88  | 99.88  | 1.000 | 0.99776 |
| 3302              | 1                    | 3.57                        | 1                     | 214                           | 899                                    | 0.001 | 214.00 | 0.24   | 1.000 | 0.99999 |
| 3311              | 2                    | 9.53                        | 2                     | 572                           | 534                                    | 0.004 | 286.00 | 1.07   | 1.000 | 0.99998 |
| 3315              | 4                    | 2.86                        | 4                     | 172                           | 1,578                                  | 0.003 | 43.00  | 0.11   | 1.000 | 0.99999 |
| 3423              | 1                    | 1.38                        | 22                    | 1,828                         | 386                                    | 0.057 | 83.09  | 4.74   | 1.000 | 0.99989 |
| 3472              | 1                    | 0.35                        | 1                     | 21                            | 1,580                                  | 0.001 | 21.00  | 0.01   | 1.000 | 0.99999 |
| 3591              | 3                    | 2.99                        | 29                    | 1,101                         | 1,204                                  | 0.024 | 37.97  | 0.91   | 1.000 | 0.99998 |
| 3593              | 2                    | 1.80                        | 10                    | 304                           | 929                                    | 0.011 | 30.40  | 0.33   | 1.000 | 0.99999 |
| 3621              | 2                    | 3.55                        | 2                     | 213                           | 1,555                                  | 0.001 | 106.50 | 0.14   | 1.000 | 0.99999 |
| 3661              | 2                    | 1.78                        | 25                    | 988                           | 1,024                                  | 0.024 | 39.52  | 0.96   | 1.000 | 0.99998 |
| 3662              | 1                    | 1.37                        | 1                     | 82                            | 778                                    | 0.001 | 82.00  | 0.11   | 1.000 | 0.99999 |
| 3663              | 1                    | 0.47                        | 1                     | 28                            | 764                                    | 0.001 | 28.00  | 0.04   | 1.000 | 0.99999 |
| 3693              | 2                    | 4.25                        | 22                    | 1,425                         | 186                                    | 0.118 | 64.77  | 7.66   | 1.000 | 0.99983 |
| 3701              | 1                    | 0.47                        | 53                    | 1,495                         | 484                                    | 0.110 | 28.21  | 3.09   | 1.000 | 0.99993 |
| 3702              | 1                    | 1.10                        | 1                     | 66                            | 611                                    | 0.002 | 66.00  | 0.11   | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 3751              | 1                    | 1.32                        | 29                    | 2,312                         | 882                                    | 0.033 | 79.72  | 2.62   | 1.000 | 0.99994 |
| 3871              | 1                    | 0.42                        | 1                     | 25                            | 1,387                                  | 0.001 | 25.00  | 0.02   | 1.000 | 0.99999 |
| 3872              | 1                    | 0.78                        | 1                     | 47                            | 1,067                                  | 0.001 | 47.00  | 0.04   | 1.000 | 0.99999 |
| 3878              | 1                    | 1.03                        | 2                     | 125                           | 966                                    | 0.002 | 62.50  | 0.13   | 1.000 | 0.99999 |
| 3891              | 1                    | 0.58                        | 1                     | 35                            | 454                                    | 0.002 | 35.00  | 0.08   | 1.000 | 0.99999 |
| 3893              | 6                    | 7.37                        | 82                    | 6,689                         | 1,111                                  | 0.074 | 81.57  | 6.02   | 1.262 | 0.99987 |
| 3901              | 2                    | 4.26                        | 88                    | 18,538                        | 876                                    | 0.100 | 210.66 | 21.16  | 1.011 | 0.99953 |
| 3903              | 2                    | 2.10                        | 2                     | 126                           | 298                                    | 0.007 | 63.00  | 0.42   | 1.000 | 0.99999 |
| 3912              | 2                    | 6.20                        | 1,112                 | 217,228                       | 1,160                                  | 0.959 | 195.35 | 187.27 | 1.001 | 0.99580 |
| 3913              | 1                    | 0.95                        | 1                     | 57                            | 810                                    | 0.001 | 57.00  | 0.07   | 1.000 | 0.99999 |
| 3951              | 5                    | 5.40                        | 88                    | 5,683                         | 928                                    | 0.095 | 64.58  | 6.12   | 1.023 | 0.99986 |
| 3952              | 7                    | 11.81                       | 202                   | 24,806                        | 1,273                                  | 0.159 | 122.80 | 19.49  | 1.031 | 0.99956 |
| 3981              | 7                    | 10.76                       | 1,529                 | 171,231                       | 1,503                                  | 1.017 | 111.99 | 113.93 | 1.017 | 0.99745 |
| 3982              | 4                    | 3.95                        | 3,641                 | 282,482                       | 1,767                                  | 2.061 | 77.58  | 159.87 | 2.059 | 0.99642 |
| 3991              | 23                   | 28.38                       | 108                   | 8,867                         | 726                                    | 0.149 | 82.10  | 12.21  | 1.049 | 0.99973 |
| 4031              | 2                    | 6.62                        | 705                   | 245,052                       | 704                                    | 1.001 | 347.59 | 348.09 | 1.001 | 0.99220 |
| 406               | 1                    | 1.12                        | 1                     | 67                            | 71                                     | 0.014 | 67.00  | 0.94   | 1.000 | 0.99998 |
| 4091              | 2                    | 5.31                        | 34                    | 6,077                         | 1,148                                  | 0.030 | 178.74 | 5.29   | 1.000 | 0.99988 |
| 4092              | 1                    | 3.93                        | 1                     | 236                           | 434                                    | 0.002 | 236.00 | 0.54   | 1.000 | 0.99999 |
| 4101              | 2                    | 4.77                        | 84                    | 16,324                        | 588                                    | 0.143 | 194.33 | 27.76  | 1.012 | 0.99938 |
| 4102              | 2                    | 3.56                        | 2                     | 214                           | 903                                    | 0.002 | 107.00 | 0.24   | 1.000 | 0.99999 |
| 4137              | 1                    | 0.58                        | 1                     | 35                            | 794                                    | 0.001 | 35.00  | 0.04   | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 4138              | 1                    | 0.47                        | 11                    | 313                           | 745                                    | 0.015 | 28.45  | 0.42   | 1.000 | 0.99999 |
| 4142              | 1                    | 1.50                        | 12                    | 1,083                         | 597                                    | 0.020 | 90.25  | 1.81   | 1.000 | 0.99996 |
| 4153              | 1                    | 0.62                        | 13                    | 483                           | 1,284                                  | 0.010 | 37.15  | 0.38   | 1.000 | 0.99999 |
| 4154              | 3                    | 4.24                        | 84                    | 8,927                         | 1,209                                  | 0.069 | 106.27 | 7.38   | 1.000 | 0.99983 |
| 4155              | 1                    | 0.65                        | 9                     | 354                           | 2,133                                  | 0.004 | 39.33  | 0.17   | 1.000 | 0.99999 |
| 4172              | 2                    | 1.19                        | 17                    | 820                           | 1,725                                  | 0.010 | 48.24  | 0.48   | 1.063 | 0.99999 |
| 4173              | 1                    | 0.73                        | 1                     | 44                            | 634                                    | 0.002 | 44.00  | 0.07   | 1.000 | 0.99999 |
| 4181              | 1                    | 1.58                        | 11                    | 1,049                         | 558                                    | 0.020 | 95.36  | 1.88   | 1.000 | 0.99996 |
| 4182              | 2                    | 1.64                        | 24                    | 1,056                         | 957                                    | 0.025 | 44.00  | 1.10   | 1.000 | 0.99998 |
| 4211              | 2                    | 3.55                        | 645                   | 4,199                         | 707                                    | 0.912 | 6.51   | 5.94   | 1.002 | 0.99987 |
| 4212              | 3                    | 2.17                        | 106                   | 6,008                         | 818                                    | 0.130 | 56.68  | 7.34   | 1.000 | 0.99984 |
| 4222              | 3                    | 5.57                        | 3                     | 334                           | 1,044                                  | 0.003 | 111.33 | 0.32   | 1.000 | 0.99999 |
| 4303              | 1                    | 1.85                        | 1                     | 111                           | 982                                    | 0.001 | 111.00 | 0.11   | 1.000 | 0.99999 |
| 4311              | 2                    | 6.72                        | 791                   | 136,697                       | 814                                    | 0.972 | 172.82 | 167.93 | 2.585 | 0.99624 |
| 4313              | 2                    | 4.76                        | 180                   | 25,805                        | 428                                    | 0.421 | 143.36 | 60.29  | 1.000 | 0.99865 |
| 432               | 1                    | 1.10                        | 1                     | 66                            | 89                                     | 0.011 | 66.00  | 0.74   | 1.000 | 0.99998 |
| 4324              | 1                    | 4.30                        | 254                   | 65,722                        | 1,254                                  | 0.203 | 258.75 | 52.41  | 1.000 | 0.99883 |
| 4341              | 1                    | 0.68                        | 38                    | 1,581                         | 1,782                                  | 0.021 | 41.61  | 0.89   | 1.000 | 0.99998 |
| 4342              | 2                    | 3.00                        | 1,856                 | 26,960                        | 1,752                                  | 1.059 | 14.53  | 15.39  | 1.059 | 0.99966 |
| 4343              | 2                    | 2.35                        | 61                    | 5,326                         | 1,025                                  | 0.060 | 87.31  | 5.20   | 1.017 | 0.99988 |
| 4361              | 1                    | 0.33                        | 1                     | 20                            | 797                                    | 0.001 | 20.00  | 0.03   | 1.000 | 0.99999 |
| 4363              | 20                   | 36.01                       | 488                   | 236,545                       | 1,676                                  | 0.291 | 484.72 | 141.14 | 1.049 | 0.99684 |

## CONFIDENTIAL 4 CSR 240-2.135(2)(A)4

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 4371              | 5                    | 7.89                        | 56                    | 4,834                         | 1,543                                  | 0.036 | 86.32  | 3.13   | 1.000 | 0.99993 |
| 4373              | 5                    | 8.12                        | 784                   | 101,229                       | 776                                    | 1.010 | 129.12 | 130.45 | 1.009 | 0.99708 |
| 4431              | 3                    | 4.28                        | 39                    | 2,697                         | 1,386                                  | 0.028 | 69.15  | 1.95   | 1.000 | 0.99996 |
| 4432              | 2                    | 2.63                        | 2                     | 158                           | 462                                    | 0.004 | 79.00  | 0.34   | 1.000 | 0.99999 |
| 4476              | 1                    | 1.57                        | 1                     | 94                            | 32                                     | 0.031 | 94.00  | 2.94   | 1.000 | 0.99993 |
| 4511              | 3                    | 2.89                        | 1,220                 | 127,229                       | 1,132                                  | 1.078 | 104.29 | 112.39 | 1.078 | 0.99748 |
| 4513              | 2                    | 15.83                       | 682                   | 84,483                        | 682                                    | 1.000 | 123.88 | 123.88 | 1.006 | 0.99723 |
| 455               | 1                    | 1.83                        | 1                     | 110                           | 168                                    | 0.006 | 110.00 | 0.65   | 1.000 | 0.99999 |
| 4601              | 1                    | 1.65                        | 1                     | 99                            | 414                                    | 0.002 | 99.00  | 0.24   | 1.000 | 0.99999 |
| 4602              | 1                    | 1.05                        | 42                    | 2,679                         | 948                                    | 0.044 | 63.79  | 2.83   | 1.000 | 0.99994 |
| 5601              | 3                    | 3.36                        | 17                    | 1,119                         | 1,164                                  | 0.015 | 65.82  | 0.96   | 1.063 | 0.99998 |
| 5602              | 1                    | 2.03                        | 1                     | 122                           | 681                                    | 0.001 | 122.00 | 0.18   | 1.000 | 0.99999 |
| 5603              | 4                    | 3.17                        | 4                     | 190                           | 1,289                                  | 0.003 | 47.50  | 0.15   | 1.000 | 0.99999 |
| 5902              | 2                    | 1.75                        | 28                    | 1,512                         | 1,012                                  | 0.028 | 54.00  | 1.49   | 1.000 | 0.99997 |
| 5905              | 2                    | 3.33                        | 2                     | 200                           | 1,876                                  | 0.001 | 100.00 | 0.11   | 1.000 | 0.99999 |
| 6021              | 1                    | 1.35                        | 1                     | 81                            | 1,275                                  | 0.001 | 81.00  | 0.06   | 1.000 | 0.99999 |
| 6022              | 1                    | 1.23                        | 51                    | 3,820                         | 490                                    | 0.104 | 74.90  | 7.80   | 1.000 | 0.99983 |
| 6023              | 1                    | 0.72                        | 1                     | 43                            | 128                                    | 0.008 | 43.00  | 0.34   | 1.000 | 0.99999 |
| 6024              | 2                    | 1.76                        | 10                    | 338                           | 393                                    | 0.025 | 33.80  | 0.86   | 1.000 | 0.99998 |
| 6141              | 6                    | 12.48                       | 25                    | 3,575                         | 636                                    | 0.039 | 143.00 | 5.62   | 1.042 | 0.99987 |
| 6393              | 1                    | 1.42                        | 1                     | 85                            | 2                                      | 0.500 | 85.00  | 42.50  | 1.000 | 0.99905 |



| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
|                   | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL<br>CUSTOMERS<br>SERVED           | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
| Total:            | 348                  | 542.45                      | 26,253                | 3,037,149                     | 164,503                                | 0.160 | 115.69 | 18.46 | 1.149 | 0.99959 |

**THE EMPIRE DISTRICT ELECTRIC COMPANY**  
**CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI**  
3/1/2017 to 3/31/2017  
EXCLUDING MAJOR EVENT DAYS

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 1052              | 4                    | 7.42                        | 1,209                 | 303,606                       | 1,160                                  | 1.042 | 251.12 | 261.73 | 1.043 | 0.99414 |
| 1082              | 7                    | 7.13                        | 250                   | 23,404                        | 1,330                                  | 0.188 | 93.62  | 17.60  | 1.068 | 0.99961 |
| 1091              | 2                    | 2.26                        | 717                   | 25,161                        | 704                                    | 1.018 | 35.09  | 35.74  | 1.001 | 0.99920 |
| 1092              | 1                    | 0.72                        | 7                     | 301                           | 971                                    | 0.007 | 43.00  | 0.31   | 1.000 | 0.99999 |
| 1093              | 1                    | 1.63                        | 1                     | 98                            | 239                                    | 0.004 | 98.00  | 0.41   | 1.000 | 0.99999 |
| 1101              | 3                    | 8.42                        | 82                    | 16,046                        | 570                                    | 0.144 | 195.68 | 28.15  | 1.025 | 0.99937 |
| 1102              | 3                    | 1.63                        | 495                   | 10,801                        | 465                                    | 1.065 | 21.82  | 23.23  | 1.065 | 0.99948 |
| 1141              | 1                    | 1.25                        | 1                     | 75                            | 902                                    | 0.001 | 75.00  | 0.08   | 1.000 | 0.99999 |
| 1142              | 1                    | 1.05                        | 1                     | 63                            | 214                                    | 0.005 | 63.00  | 0.29   | 1.000 | 0.99999 |
| 1211              | 3                    | 4.41                        | 3                     | 265                           | 1,479                                  | 0.002 | 88.33  | 0.18   | 1.000 | 0.99999 |
| 1212              | 3                    | 5.34                        | 7                     | 679                           | 332                                    | 0.021 | 97.00  | 2.05   | 1.000 | 0.99995 |
| 1213              | 1                    | 1.38                        | 1                     | 83                            | 554                                    | 0.002 | 83.00  | 0.15   | 1.000 | 0.99999 |
| 1232              | 2                    | 4.12                        | 48                    | 5,729                         | 1,183                                  | 0.041 | 119.35 | 4.84   | 1.000 | 0.99989 |
| 1241              | 4                    | 11.77                       | 60                    | 11,178                        | 853                                    | 0.070 | 186.30 | 13.10  | 1.395 | 0.99971 |
| 1242              | 2                    | 3.51                        | 36                    | 3,210                         | 680                                    | 0.053 | 89.17  | 4.72   | 1.000 | 0.99989 |
| 1263              | 1                    | 2.87                        | 7                     | 1,209                         | 1,135                                  | 0.006 | 172.71 | 1.07   | 1.000 | 0.99998 |
| 1264              | 1                    | 1.00                        | 1                     | 60                            | 18                                     | 0.056 | 60.00  | 3.33   | 1.000 | 0.99993 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 1282              | 1                    | 7.00                        | 1                     | 420                           | 864                                    | 0.001 | 420.00 | 0.49   | 1.000 | 0.99999 |
| 1283              | 1                    | 0.78                        | 1                     | 47                            | 370                                    | 0.003 | 47.00  | 0.13   | 1.000 | 0.99999 |
| 1284              | 1                    | 0.83                        | 1                     | 50                            | 948                                    | 0.001 | 50.00  | 0.05   | 1.000 | 0.99999 |
| 1285              | 1                    | 4.93                        | 180                   | 53,376                        | 1,094                                  | 0.165 | 296.53 | 48.79  | 1.000 | 0.99891 |
| 1311              | 5                    | 4.11                        | 5                     | 247                           | 272                                    | 0.018 | 49.40  | 0.91   | 1.000 | 0.99998 |
| 1453              | 1                    | 0.68                        | 43                    | 1,763                         | 1,797                                  | 0.024 | 41.00  | 0.98   | 1.000 | 0.99998 |
| 1521              | 1                    | 1.20                        | 1                     | 72                            | 361                                    | 0.003 | 72.00  | 0.20   | 1.000 | 0.99999 |
| 1522              | 1                    | 2.97                        | 1                     | 178                           | 102                                    | 0.010 | 178.00 | 1.75   | 1.000 | 0.99996 |
| 1523              | 6                    | 19.70                       | 14                    | 1,916                         | 723                                    | 0.019 | 136.86 | 2.65   | 1.000 | 0.99994 |
| 1841              | 1                    | 0.83                        | 1                     | 50                            | 650                                    | 0.002 | 50.00  | 0.08   | 1.000 | 0.99999 |
| 2051              | 2                    | 2.48                        | 2                     | 149                           | 165                                    | 0.012 | 74.50  | 0.90   | 1.000 | 0.99998 |
| 2172              | 1                    | 3.18                        | 1                     | 191                           | 224                                    | 0.004 | 191.00 | 0.85   | 1.000 | 0.99998 |
| 2211              | 2                    | 2.25                        | 743                   | 40,340                        | 723                                    | 1.028 | 54.29  | 55.80  | 1.028 | 0.99875 |
| 2212              | 3                    | 6.00                        | 1,288                 | 19,571                        | 1,295                                  | 0.995 | 15.19  | 15.11  | 1.002 | 0.99966 |
| 2492              | 1                    | 1.25                        | 29                    | 2,191                         | 29                                     | 1.000 | 75.55  | 75.55  | 1.000 | 0.99831 |
| 2511              | 2                    | 2.30                        | 619                   | 39,596                        | 618                                    | 1.002 | 63.97  | 64.07  | 1.002 | 0.99856 |
| 2621              | 3                    | 5.42                        | 25                    | 2,463                         | 1,166                                  | 0.021 | 98.52  | 2.11   | 1.000 | 0.99995 |
| 2622              | 2                    | 5.40                        | 14                    | 2,280                         | 113                                    | 0.124 | 162.86 | 20.18  | 1.000 | 0.99955 |
| 2921              | 1                    | 1.57                        | 375                   | 35,468                        | 375                                    | 1.000 | 94.58  | 94.58  | 1.000 | 0.99788 |
| 2951              | 2                    | 3.17                        | 14                    | 1,346                         | 1,395                                  | 0.010 | 96.14  | 0.96   | 1.000 | 0.99998 |
| 2961              | 2                    | 2.92                        | 653                   | 72,849                        | 648                                    | 1.008 | 111.56 | 112.42 | 1.014 | 0.99748 |
| 2962              | 1                    | 1.70                        | 257                   | 26,419                        | 257                                    | 1.000 | 102.80 | 102.80 | 1.000 | 0.99770 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 3082              | 5                    | 20.17                       | 353                   | 102,803                       | 322                                    | 1.096 | 291.23 | 319.26 | 1.096 | 0.99285 |
| 3121              | 4                    | 7.29                        | 1,142                 | 162,004                       | 1,131                                  | 1.010 | 141.86 | 143.24 | 2.555 | 0.99679 |
| 3122              | 28                   | 9.99                        | 969                   | 50,362                        | 849                                    | 1.141 | 51.97  | 59.32  | 1.141 | 0.99867 |
| 3181              | 4                    | 12.15                       | 727                   | 109,215                       | 724                                    | 1.004 | 150.23 | 150.85 | 1.004 | 0.99662 |
| 3221              | 3                    | 3.15                        | 150                   | 12,458                        | 1,241                                  | 0.121 | 83.05  | 10.04  | 1.007 | 0.99978 |
| 3222              | 20                   | 28.30                       | 45                    | 3,984                         | 770                                    | 0.058 | 88.53  | 5.17   | 1.098 | 0.99988 |
| 3232              | 1                    | 1.15                        | 12                    | 831                           | 429                                    | 0.028 | 69.25  | 1.94   | 1.000 | 0.99996 |
| 3301              | 1                    | 1.65                        | 196                   | 19,577                        | 196                                    | 1.000 | 99.88  | 99.88  | 1.000 | 0.99776 |
| 3302              | 1                    | 3.57                        | 1                     | 214                           | 899                                    | 0.001 | 214.00 | 0.24   | 1.000 | 0.99999 |
| 3311              | 2                    | 9.53                        | 2                     | 572                           | 534                                    | 0.004 | 286.00 | 1.07   | 1.000 | 0.99998 |
| 3315              | 4                    | 2.86                        | 4                     | 172                           | 1,578                                  | 0.003 | 43.00  | 0.11   | 1.000 | 0.99999 |
| 3423              | 1                    | 1.38                        | 22                    | 1,828                         | 386                                    | 0.057 | 83.09  | 4.74   | 1.000 | 0.99989 |
| 3472              | 1                    | 0.35                        | 1                     | 21                            | 1,580                                  | 0.001 | 21.00  | 0.01   | 1.000 | 0.99999 |
| 3591              | 3                    | 2.99                        | 29                    | 1,101                         | 1,204                                  | 0.024 | 37.97  | 0.91   | 1.000 | 0.99998 |
| 3593              | 2                    | 1.80                        | 10                    | 304                           | 929                                    | 0.011 | 30.40  | 0.33   | 1.000 | 0.99999 |
| 3621              | 2                    | 3.55                        | 2                     | 213                           | 1,555                                  | 0.001 | 106.50 | 0.14   | 1.000 | 0.99999 |
| 3661              | 2                    | 1.78                        | 25                    | 988                           | 1,024                                  | 0.024 | 39.52  | 0.96   | 1.000 | 0.99998 |
| 3662              | 1                    | 1.37                        | 1                     | 82                            | 778                                    | 0.001 | 82.00  | 0.11   | 1.000 | 0.99999 |
| 3663              | 1                    | 0.47                        | 1                     | 28                            | 764                                    | 0.001 | 28.00  | 0.04   | 1.000 | 0.99999 |
| 3693              | 2                    | 4.25                        | 22                    | 1,425                         | 186                                    | 0.118 | 64.77  | 7.66   | 1.000 | 0.99983 |
| 3701              | 1                    | 0.47                        | 53                    | 1,495                         | 484                                    | 0.110 | 28.21  | 3.09   | 1.000 | 0.99993 |
| 3702              | 1                    | 1.10                        | 1                     | 66                            | 611                                    | 0.002 | 66.00  | 0.11   | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 3751              | 1                    | 1.32                        | 29                    | 2,312                         | 882                                    | 0.033 | 79.72  | 2.62   | 1.000 | 0.99994 |
| 3871              | 1                    | 0.42                        | 1                     | 25                            | 1,387                                  | 0.001 | 25.00  | 0.02   | 1.000 | 0.99999 |
| 3872              | 1                    | 0.78                        | 1                     | 47                            | 1,067                                  | 0.001 | 47.00  | 0.04   | 1.000 | 0.99999 |
| 3878              | 1                    | 1.03                        | 2                     | 125                           | 966                                    | 0.002 | 62.50  | 0.13   | 1.000 | 0.99999 |
| 3891              | 1                    | 0.58                        | 1                     | 35                            | 454                                    | 0.002 | 35.00  | 0.08   | 1.000 | 0.99999 |
| 3893              | 6                    | 7.37                        | 82                    | 6,689                         | 1,111                                  | 0.074 | 81.57  | 6.02   | 1.262 | 0.99987 |
| 3901              | 2                    | 4.26                        | 88                    | 18,538                        | 876                                    | 0.100 | 210.66 | 21.16  | 1.011 | 0.99953 |
| 3903              | 2                    | 2.10                        | 2                     | 126                           | 298                                    | 0.007 | 63.00  | 0.42   | 1.000 | 0.99999 |
| 3912              | 2                    | 6.20                        | 1,112                 | 217,228                       | 1,160                                  | 0.959 | 195.35 | 187.27 | 1.001 | 0.99580 |
| 3913              | 1                    | 0.95                        | 1                     | 57                            | 810                                    | 0.001 | 57.00  | 0.07   | 1.000 | 0.99999 |
| 3951              | 5                    | 5.40                        | 88                    | 5,683                         | 928                                    | 0.095 | 64.58  | 6.12   | 1.023 | 0.99986 |
| 3952              | 7                    | 11.81                       | 202                   | 24,806                        | 1,273                                  | 0.159 | 122.80 | 19.49  | 1.031 | 0.99956 |
| 3981              | 7                    | 10.76                       | 1,529                 | 171,231                       | 1,503                                  | 1.017 | 111.99 | 113.93 | 1.017 | 0.99745 |
| 3982              | 4                    | 3.95                        | 3,641                 | 282,482                       | 1,767                                  | 2.061 | 77.58  | 159.87 | 2.059 | 0.99642 |
| 3991              | 23                   | 28.38                       | 108                   | 8,867                         | 726                                    | 0.149 | 82.10  | 12.21  | 1.049 | 0.99973 |
| 4031              | 2                    | 6.62                        | 705                   | 245,052                       | 704                                    | 1.001 | 347.59 | 348.09 | 1.001 | 0.99220 |
| 406               | 1                    | 1.12                        | 1                     | 67                            | 71                                     | 0.014 | 67.00  | 0.94   | 1.000 | 0.99998 |
| 4091              | 2                    | 5.31                        | 34                    | 6,077                         | 1,148                                  | 0.030 | 178.74 | 5.29   | 1.000 | 0.99988 |
| 4092              | 1                    | 3.93                        | 1                     | 236                           | 434                                    | 0.002 | 236.00 | 0.54   | 1.000 | 0.99999 |
| 4101              | 2                    | 4.77                        | 84                    | 16,324                        | 588                                    | 0.143 | 194.33 | 27.76  | 1.012 | 0.99938 |
| 4102              | 2                    | 3.56                        | 2                     | 214                           | 903                                    | 0.002 | 107.00 | 0.24   | 1.000 | 0.99999 |
| 4137              | 1                    | 0.58                        | 1                     | 35                            | 794                                    | 0.001 | 35.00  | 0.04   | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 4138              | 1                    | 0.47                        | 11                    | 313                           | 745                                    | 0.015 | 28.45  | 0.42   | 1.000 | 0.99999 |
| 4142              | 1                    | 1.50                        | 12                    | 1,083                         | 597                                    | 0.020 | 90.25  | 1.81   | 1.000 | 0.99996 |
| 4153              | 1                    | 0.62                        | 13                    | 483                           | 1,284                                  | 0.010 | 37.15  | 0.38   | 1.000 | 0.99999 |
| 4154              | 3                    | 4.24                        | 84                    | 8,927                         | 1,209                                  | 0.069 | 106.27 | 7.38   | 1.000 | 0.99983 |
| 4155              | 1                    | 0.65                        | 9                     | 354                           | 2,133                                  | 0.004 | 39.33  | 0.17   | 1.000 | 0.99999 |
| 4172              | 2                    | 1.19                        | 17                    | 820                           | 1,725                                  | 0.010 | 48.24  | 0.48   | 1.063 | 0.99999 |
| 4173              | 1                    | 0.73                        | 1                     | 44                            | 634                                    | 0.002 | 44.00  | 0.07   | 1.000 | 0.99999 |
| 4181              | 1                    | 1.58                        | 11                    | 1,049                         | 558                                    | 0.020 | 95.36  | 1.88   | 1.000 | 0.99996 |
| 4182              | 2                    | 1.64                        | 24                    | 1,056                         | 957                                    | 0.025 | 44.00  | 1.10   | 1.000 | 0.99998 |
| 4211              | 2                    | 3.55                        | 645                   | 4,199                         | 707                                    | 0.912 | 6.51   | 5.94   | 1.002 | 0.99987 |
| 4212              | 3                    | 2.17                        | 106                   | 6,008                         | 818                                    | 0.130 | 56.68  | 7.34   | 1.000 | 0.99984 |
| 4222              | 3                    | 5.57                        | 3                     | 334                           | 1,044                                  | 0.003 | 111.33 | 0.32   | 1.000 | 0.99999 |
| 4303              | 1                    | 1.85                        | 1                     | 111                           | 982                                    | 0.001 | 111.00 | 0.11   | 1.000 | 0.99999 |
| 4311              | 2                    | 6.72                        | 791                   | 136,697                       | 814                                    | 0.972 | 172.82 | 167.93 | 2.585 | 0.99624 |
| 4313              | 2                    | 4.76                        | 180                   | 25,805                        | 428                                    | 0.421 | 143.36 | 60.29  | 1.000 | 0.99865 |
| 432               | 1                    | 1.10                        | 1                     | 66                            | 89                                     | 0.011 | 66.00  | 0.74   | 1.000 | 0.99998 |
| 4324              | 1                    | 4.30                        | 254                   | 65,722                        | 1,254                                  | 0.203 | 258.75 | 52.41  | 1.000 | 0.99883 |
| 4341              | 1                    | 0.68                        | 38                    | 1,581                         | 1,782                                  | 0.021 | 41.61  | 0.89   | 1.000 | 0.99998 |
| 4342              | 2                    | 3.00                        | 1,856                 | 26,960                        | 1,752                                  | 1.059 | 14.53  | 15.39  | 1.059 | 0.99966 |
| 4343              | 2                    | 2.35                        | 61                    | 5,326                         | 1,025                                  | 0.060 | 87.31  | 5.20   | 1.017 | 0.99988 |
| 4361              | 1                    | 0.33                        | 1                     | 20                            | 797                                    | 0.001 | 20.00  | 0.03   | 1.000 | 0.99999 |
| 4363              | 20                   | 36.01                       | 488                   | 236,545                       | 1,676                                  | 0.291 | 484.72 | 141.14 | 1.049 | 0.99684 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 4371              | 5                    | 7.89                        | 56                    | 4,834                         | 1,543                                  | 0.036 | 86.32  | 3.13   | 1.000 | 0.99993 |
| 4373              | 5                    | 8.12                        | 784                   | 101,229                       | 776                                    | 1.010 | 129.12 | 130.45 | 1.009 | 0.99708 |
| 4431              | 3                    | 4.28                        | 39                    | 2,697                         | 1,386                                  | 0.028 | 69.15  | 1.95   | 1.000 | 0.99996 |
| 4432              | 2                    | 2.63                        | 2                     | 158                           | 462                                    | 0.004 | 79.00  | 0.34   | 1.000 | 0.99999 |
| 4476              | 1                    | 1.57                        | 1                     | 94                            | 32                                     | 0.031 | 94.00  | 2.94   | 1.000 | 0.99993 |
| 4511              | 3                    | 2.89                        | 1,220                 | 127,229                       | 1,132                                  | 1.078 | 104.29 | 112.39 | 1.078 | 0.99748 |
| 4513              | 2                    | 15.83                       | 682                   | 84,483                        | 682                                    | 1.000 | 123.88 | 123.88 | 1.006 | 0.99723 |
| 455               | 1                    | 1.83                        | 1                     | 110                           | 168                                    | 0.006 | 110.00 | 0.65   | 1.000 | 0.99999 |
| 4601              | 1                    | 1.65                        | 1                     | 99                            | 414                                    | 0.002 | 99.00  | 0.24   | 1.000 | 0.99999 |
| 4602              | 1                    | 1.05                        | 42                    | 2,679                         | 948                                    | 0.044 | 63.79  | 2.83   | 1.000 | 0.99994 |
| 5601              | 3                    | 3.36                        | 17                    | 1,119                         | 1,164                                  | 0.015 | 65.82  | 0.96   | 1.063 | 0.99998 |
| 5602              | 1                    | 2.03                        | 1                     | 122                           | 681                                    | 0.001 | 122.00 | 0.18   | 1.000 | 0.99999 |
| 5603              | 4                    | 3.17                        | 4                     | 190                           | 1,289                                  | 0.003 | 47.50  | 0.15   | 1.000 | 0.99999 |
| 5902              | 2                    | 1.75                        | 28                    | 1,512                         | 1,012                                  | 0.028 | 54.00  | 1.49   | 1.000 | 0.99997 |
| 5905              | 2                    | 3.33                        | 2                     | 200                           | 1,876                                  | 0.001 | 100.00 | 0.11   | 1.000 | 0.99999 |
| 6021              | 1                    | 1.35                        | 1                     | 81                            | 1,275                                  | 0.001 | 81.00  | 0.06   | 1.000 | 0.99999 |
| 6022              | 1                    | 1.23                        | 51                    | 3,820                         | 490                                    | 0.104 | 74.90  | 7.80   | 1.000 | 0.99983 |
| 6023              | 1                    | 0.72                        | 1                     | 43                            | 128                                    | 0.008 | 43.00  | 0.34   | 1.000 | 0.99999 |
| 6024              | 2                    | 1.76                        | 10                    | 338                           | 393                                    | 0.025 | 33.80  | 0.86   | 1.000 | 0.99998 |
| 6141              | 6                    | 12.48                       | 25                    | 3,575                         | 636                                    | 0.039 | 143.00 | 5.62   | 1.042 | 0.99987 |
| 6393              | 1                    | 1.42                        | 1                     | 85                            | 2                                      | 0.500 | 85.00  | 42.50  | 1.000 | 0.99905 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
|                   | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL<br>CUSTOMERS<br>SERVED           | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
| Total:            | 348                  | 542.45                      | 26,253                | 3,037,149                     | 164,503                                | 0.160 | 115.69 | 18.46 | 1.149 | 0.99959 |



**THE EMPIRE DISTRICT ELECTRIC COMPANY**  
**CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI**  
*4/1/2017 to 4/30/2017*  
**INCLUDING MAJOR EVENT DAYS**

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 1050              | 4                    | 6.31                        | 13                    | 1,462                         | 1,597                                  | 0.008 | 112.46 | 0.92  | 1.000 | 0.99998 |
| 1082              | 6                    | 14.01                       | 22                    | 3,006                         | 1,330                                  | 0.017 | 136.64 | 2.26  | 1.100 | 0.99995 |
| 1092              | 7                    | 14.93                       | 977                   | 35,848                        | 971                                    | 1.006 | 36.69  | 36.92 | 1.006 | 0.99915 |
| 1093              | 1                    | 0.52                        | 28                    | 880                           | 239                                    | 0.117 | 31.43  | 3.68  | 1.000 | 0.99991 |
| 1141              | 2                    | 4.82                        | 2                     | 289                           | 902                                    | 0.002 | 144.50 | 0.32  | 1.000 | 0.99999 |
| 1142              | 1                    | 1.22                        | 1                     | 73                            | 214                                    | 0.005 | 73.00  | 0.34  | 1.000 | 0.99999 |
| 1211              | 5                    | 5.65                        | 5                     | 339                           | 1,479                                  | 0.003 | 67.80  | 0.23  | 1.250 | 0.99999 |
| 1212              | 1                    | 0.87                        | 3                     | 156                           | 332                                    | 0.009 | 52.00  | 0.47  | 1.000 | 0.99999 |
| 1213              | 4                    | 7.61                        | 61                    | 15,817                        | 554                                    | 0.110 | 259.30 | 28.55 | 1.000 | 0.99934 |
| 1230              | 2                    | 4.45                        | 49                    | 11,231                        | 1,177                                  | 0.042 | 229.20 | 9.54  | 1.021 | 0.99978 |
| 1233              | 1                    | 0.62                        | 640                   | 23,840                        | 640                                    | 1.000 | 37.25  | 37.25 | 1.000 | 0.99914 |
| 1241              | 1                    | 1.00                        | 1                     | 60                            | 853                                    | 0.001 | 60.00  | 0.07  | 1.000 | 0.99999 |
| 1242              | 1                    | 0.52                        | 1                     | 31                            | 680                                    | 0.001 | 31.00  | 0.05  | 1.000 | 0.99999 |
| 1243              | 2                    | 2.26                        | 6                     | 304                           | 1,199                                  | 0.005 | 50.67  | 0.25  | 1.000 | 0.99999 |
| 1261              | 1                    | 1.53                        | 1                     | 92                            | 397                                    | 0.003 | 92.00  | 0.23  | 1.000 | 0.99999 |
| 1265              | 1                    | 3.10                        | 124                   | 23,088                        | 1,282                                  | 0.097 | 186.19 | 18.01 | 1.000 | 0.99958 |
| 1271              | 4                    | 3.85                        | 13                    | 792                           | 962                                    | 0.014 | 60.92  | 0.82  | 1.000 | 0.99998 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 1284              | 1                    | 1.15                        | 65                    | 4,519                         | 948                                    | 0.069 | 69.52  | 4.77   | 1.000 | 0.99989 |
| 1285              | 1                    | 1.77                        | 21                    | 2,226                         | 1,094                                  | 0.019 | 106.00 | 2.03   | 1.000 | 0.99995 |
| 1311              | 1                    | 9.27                        | 116                   | 64,517                        | 272                                    | 0.426 | 556.18 | 237.19 | 1.000 | 0.99451 |
| 1312              | 3                    | 21.51                       | 17                    | 1,806                         | 933                                    | 0.018 | 106.24 | 1.94   | 1.000 | 0.99996 |
| 1452              | 3                    | 5.37                        | 3                     | 322                           | 449                                    | 0.007 | 107.33 | 0.72   | 1.000 | 0.99998 |
| 1453              | 3                    | 1.73                        | 3                     | 104                           | 1,797                                  | 0.002 | 34.67  | 0.06   | 1.500 | 0.99999 |
| 1455              | 1                    | 5.32                        | 1                     | 319                           | 389                                    | 0.003 | 319.00 | 0.82   | 1.000 | 0.99998 |
| 1521              | 2                    | 1.78                        | 72                    | 5,753                         | 361                                    | 0.199 | 79.90  | 15.94  | 1.014 | 0.99963 |
| 1523              | 4                    | 5.04                        | 56                    | 5,943                         | 723                                    | 0.077 | 106.13 | 8.22   | 1.098 | 0.99981 |
| 1841              | 1                    | 0.22                        | 653                   | 8,512                         | 650                                    | 1.005 | 13.04  | 13.10  | 1.000 | 0.99970 |
| 1842              | 4                    | 45.23                       | 284                   | 52,941                        | 281                                    | 1.011 | 186.41 | 188.40 | 1.011 | 0.99564 |
| 1843              | 19                   | 164.22                      | 479                   | 218,789                       | 1,086                                  | 0.441 | 456.76 | 201.46 | 1.000 | 0.99534 |
| 2051              | 6                    | 8.58                        | 21                    | 1,600                         | 165                                    | 0.127 | 76.19  | 9.70   | 1.000 | 0.99978 |
| 2052              | 5                    | 7.07                        | 63                    | 8,190                         | 85                                     | 0.741 | 130.00 | 96.35  | 1.033 | 0.99777 |
| 2092              | 1                    | 1.53                        | 1                     | 92                            | 917                                    | 0.001 | 92.00  | 0.10   | 1.000 | 0.99999 |
| 2171              | 3                    | 3.94                        | 3                     | 236                           | 564                                    | 0.005 | 78.67  | 0.42   | 1.000 | 0.99999 |
| 2172              | 1                    | 1.73                        | 1                     | 104                           | 223                                    | 0.004 | 104.00 | 0.47   | 1.000 | 0.99999 |
| 2211              | 1                    | 0.60                        | 47                    | 1,720                         | 723                                    | 0.065 | 36.60  | 2.38   | 1.000 | 0.99994 |
| 2212              | 1                    | 1.23                        | 1                     | 74                            | 1,294                                  | 0.001 | 74.00  | 0.06   | 1.000 | 0.99999 |
| 2501              | 1                    | 0.90                        | 1                     | 54                            | 84                                     | 0.012 | 54.00  | 0.64   | 1.000 | 0.99999 |
| 2511              | 1                    | 1.63                        | 1                     | 98                            | 618                                    | 0.002 | 98.00  | 0.16   | 1.000 | 0.99999 |
| 2621              | 2                    | 5.24                        | 2                     | 314                           | 1,166                                  | 0.002 | 157.00 | 0.27   | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI   | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|---------|-------|---------|
| 2921              | 1                    | 0.78                        | 1                     | 47                            | 375                                    | 0.003 | 47.00  | 0.13    | 1.000 | 0.99999 |
| 2951              | 7                    | 18.84                       | 56                    | 9,145                         | 1,395                                  | 0.040 | 163.30 | 6.56    | 1.120 | 0.99985 |
| 2952              | 2                    | 2.43                        | 2                     | 146                           | 154                                    | 0.013 | 73.00  | 0.95    | 1.000 | 0.99998 |
| 2961              | 8                    | 69.18                       | 1,323                 | 210,268                       | 648                                    | 2.042 | 158.93 | 324.49  | 2.054 | 0.99249 |
| 2962              | 2                    | 34.95                       | 258                   | 94,005                        | 257                                    | 1.004 | 364.36 | 365.78  | 1.004 | 0.99153 |
| 3041              | 1                    | 0.70                        | 46                    | 1,935                         | 80                                     | 0.575 | 42.07  | 24.19   | 1.000 | 0.99944 |
| 3081              | 1                    | 1.37                        | 1                     | 82                            | 573                                    | 0.002 | 82.00  | 0.14    | 1.000 | 0.99999 |
| 3122              | 6                    | 13.51                       | 39                    | 7,015                         | 849                                    | 0.046 | 179.87 | 8.26    | 1.054 | 0.99981 |
| 3123              | 2                    | 6.47                        | 16                    | 3,332                         | 1,050                                  | 0.015 | 208.25 | 3.17    | 1.000 | 0.99993 |
| 3181              | 2                    | 2.12                        | 2                     | 127                           | 724                                    | 0.003 | 63.50  | 0.18    | 1.000 | 0.99999 |
| 3221              | 8                    | 14.65                       | 3,764                 | 178,545                       | 1,241                                  | 3.033 | 47.43  | 143.87  | 3.033 | 0.99667 |
| 3222              | 4                    | 17.73                       | 1,544                 | 203,536                       | 771                                    | 2.003 | 131.82 | 263.99  | 2.003 | 0.99389 |
| 3232              | 1                    | 1.97                        | 13                    | 1,545                         | 427                                    | 0.030 | 118.85 | 3.62    | 1.000 | 0.99992 |
| 3303              | 2                    | 2.25                        | 58                    | 4,055                         | 979                                    | 0.059 | 69.91  | 4.14    | 1.018 | 0.99990 |
| 3311              | 5                    | 21.58                       | 46                    | 12,861                        | 534                                    | 0.086 | 279.59 | 24.08   | 2.000 | 0.99944 |
| 3314              | 2                    | 1.30                        | 21                    | 452                           | 222                                    | 0.095 | 21.52  | 2.04    | 1.050 | 0.99995 |
| 3315              | 10                   | 30.03                       | 3,385                 | 1,623,948                     | 1,579                                  | 2.144 | 479.75 | 1028.47 | 9.124 | 0.97619 |
| 3422              | 1                    | 0.92                        | 1                     | 55                            | 971                                    | 0.001 | 55.00  | 0.06    | 1.000 | 0.99999 |
| 3423              | 3                    | 3.62                        | 3                     | 217                           | 386                                    | 0.008 | 72.33  | 0.56    | 1.000 | 0.99999 |
| 3471              | 1                    | 0.60                        | 1                     | 36                            | 170                                    | 0.006 | 36.00  | 0.21    | 1.000 | 0.99999 |
| 3472              | 15                   | 82.24                       | 3,169                 | 108,963                       | 1,580                                  | 2.006 | 34.38  | 68.96   | 2.008 | 0.99840 |
| 3552              | 1                    | 1.23                        | 20                    | 1,487                         | 575                                    | 0.035 | 74.35  | 2.59    | 1.000 | 0.99994 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI   | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|---------|--------|-------|---------|
| 3553              | 3                    | 4.85                        | 3                     | 291                           | 1,045                                  | 0.003 | 97.00   | 0.28   | 1.000 | 0.99999 |
| 3591              | 2                    | 8.07                        | 26                    | 6,310                         | 1,202                                  | 0.022 | 242.69  | 5.25   | 2.000 | 0.99988 |
| 3592              | 3                    | 5.76                        | 8                     | 867                           | 1,747                                  | 0.005 | 108.38  | 0.50   | 1.000 | 0.99999 |
| 3594              | 5                    | 5.67                        | 21                    | 1,300                         | 680                                    | 0.031 | 61.90   | 1.91   | 1.050 | 0.99996 |
| 3621              | 7                    | 14.61                       | 65                    | 3,164                         | 1,552                                  | 0.042 | 48.68   | 2.04   | 1.016 | 0.99995 |
| 3661              | 2                    | 3.47                        | 9                     | 383                           | 1,022                                  | 0.009 | 42.56   | 0.37   | 1.000 | 0.99999 |
| 3662              | 3                    | 1.97                        | 3                     | 118                           | 779                                    | 0.004 | 39.33   | 0.15   | 1.000 | 0.99999 |
| 3663              | 3                    | 4.08                        | 20                    | 2,227                         | 734                                    | 0.027 | 111.35  | 3.03   | 1.111 | 0.99993 |
| 3664              | 2                    | 1.03                        | 2                     | 62                            | 549                                    | 0.004 | 31.00   | 0.11   | 1.000 | 0.99999 |
| 3673              | 1                    | 4.63                        | 1                     | 278                           | 267                                    | 0.004 | 278.00  | 1.04   | 1.000 | 0.99998 |
| 3691              | 1                    | 2.95                        | 5                     | 885                           | 1,163                                  | 0.004 | 177.00  | 0.76   | 1.000 | 0.99998 |
| 3751              | 8                    | 110.71                      | 46                    | 46,505                        | 882                                    | 0.052 | 1010.98 | 52.73  | 1.000 | 0.99878 |
| 3871              | 3                    | 8.05                        | 3                     | 483                           | 1,387                                  | 0.002 | 161.00  | 0.35   | 1.000 | 0.99999 |
| 3872              | 5                    | 6.36                        | 60                    | 4,540                         | 1,067                                  | 0.056 | 75.67   | 4.25   | 2.000 | 0.99990 |
| 3878              | 9                    | 28.77                       | 64                    | 10,066                        | 792                                    | 0.081 | 157.28  | 12.71  | 1.000 | 0.99971 |
| 3891              | 2                    | 1.19                        | 2                     | 71                            | 455                                    | 0.004 | 35.50   | 0.16   | 1.000 | 0.99999 |
| 3892              | 1                    | 1.35                        | 1                     | 81                            | 503                                    | 0.002 | 81.00   | 0.16   | 1.000 | 0.99999 |
| 3893              | 9                    | 17.74                       | 748                   | 117,837                       | 1,111                                  | 0.673 | 157.54  | 106.06 | 1.228 | 0.99754 |
| 3901              | 7                    | 10.38                       | 11                    | 1,207                         | 874                                    | 0.013 | 109.73  | 1.38   | 1.000 | 0.99997 |
| 3903              | 2                    | 4.12                        | 29                    | 2,530                         | 298                                    | 0.097 | 87.24   | 8.49   | 1.036 | 0.99980 |
| 3912              | 3                    | 8.75                        | 10                    | 1,399                         | 1,160                                  | 0.009 | 139.90  | 1.21   | 1.111 | 0.99997 |
| 3913              | 1                    | 1.57                        | 2                     | 189                           | 810                                    | 0.002 | 94.50   | 0.23   | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 3951              | 6                    | 5.85                        | 896                   | 70,365                        | 929                                    | 0.964 | 78.53  | 75.74  | 1.006 | 0.99825 |
| 3952              | 3                    | 4.88                        | 19                    | 1,154                         | 1,273                                  | 0.015 | 60.74  | 0.91   | 1.056 | 0.99998 |
| 3953              | 3                    | 3.74                        | 3                     | 224                           | 521                                    | 0.006 | 74.67  | 0.43   | 1.000 | 0.99999 |
| 3981              | 26                   | 152.64                      | 1,736                 | 239,675                       | 1,503                                  | 1.155 | 138.06 | 159.46 | 1.155 | 0.99631 |
| 3982              | 11                   | 28.23                       | 3,787                 | 400,839                       | 1,769                                  | 2.141 | 105.85 | 226.59 | 2.141 | 0.99475 |
| 3991              | 11                   | 34.54                       | 70                    | 6,238                         | 726                                    | 0.096 | 89.11  | 8.59   | 1.111 | 0.99980 |
| 4031              | 2                    | 3.80                        | 717                   | 112,207                       | 704                                    | 1.018 | 156.50 | 159.38 | 1.018 | 0.99631 |
| 4091              | 1                    | 1.08                        | 26                    | 1,714                         | 1,148                                  | 0.023 | 65.92  | 1.49   | 1.000 | 0.99997 |
| 4092              | 2                    | 3.51                        | 12                    | 1,291                         | 434                                    | 0.028 | 107.58 | 2.97   | 1.000 | 0.99993 |
| 4101              | 1                    | 3.95                        | 9                     | 2,139                         | 589                                    | 0.015 | 237.67 | 3.63   | 1.000 | 0.99992 |
| 4102              | 1                    | 2.02                        | 1                     | 121                           | 903                                    | 0.001 | 121.00 | 0.13   | 1.000 | 0.99999 |
| 4133              | 1                    | 1.37                        | 18                    | 1,479                         | 640                                    | 0.028 | 82.17  | 2.31   | 1.000 | 0.99995 |
| 4136              | 5                    | 5.45                        | 1,272                 | 131,213                       | 669                                    | 1.901 | 103.15 | 196.13 | 2.623 | 0.99546 |
| 4138              | 4                    | 7.00                        | 55                    | 10,968                        | 745                                    | 0.074 | 199.42 | 14.72  | 1.000 | 0.99966 |
| 4142              | 2                    | 4.90                        | 13                    | 2,194                         | 597                                    | 0.022 | 168.77 | 3.68   | 1.000 | 0.99991 |
| 4151              | 3                    | 5.18                        | 37                    | 1,911                         | 1,246                                  | 0.030 | 51.65  | 1.53   | 1.057 | 0.99996 |
| 4152              | 1                    | 0.55                        | 1                     | 33                            | 820                                    | 0.001 | 33.00  | 0.04   | 1.000 | 0.99999 |
| 4153              | 2                    | 1.78                        | 14                    | 618                           | 1,285                                  | 0.011 | 44.14  | 0.48   | 1.000 | 0.99999 |
| 4155              | 14                   | 20.32                       | 123                   | 12,446                        | 2,133                                  | 0.058 | 101.19 | 5.83   | 1.000 | 0.99986 |
| 4172              | 1                    | 0.30                        | 103                   | 1,874                         | 1,726                                  | 0.060 | 18.19  | 1.09   | 1.000 | 0.99997 |
| 4173              | 3                    | 1.12                        | 6                     | 203                           | 634                                    | 0.009 | 33.83  | 0.32   | 1.000 | 0.99999 |
| 4182              | 2                    | 1.56                        | 2                     | 94                            | 891                                    | 0.002 | 47.00  | 0.11   | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 4212              | 8                    | 13.21                       | 1,281                 | 44,185                        | 819                                    | 1.564 | 34.49  | 53.95  | 1.564 | 0.99875 |
| 4222              | 2                    | 2.75                        | 18                    | 747                           | 1,045                                  | 0.017 | 41.50  | 0.71   | 1.059 | 0.99998 |
| 4302              | 1                    | 2.78                        | 1                     | 167                           | 651                                    | 0.002 | 167.00 | 0.26   | 1.000 | 0.99999 |
| 4303              | 1                    | 6.18                        | 1                     | 371                           | 982                                    | 0.001 | 371.00 | 0.38   | 1.000 | 0.99999 |
| 4313              | 2                    | 2.35                        | 14                    | 599                           | 535                                    | 0.026 | 42.79  | 1.12   | 1.000 | 0.99997 |
| 4324              | 3                    | 4.31                        | 137                   | 14,727                        | 1,255                                  | 0.109 | 107.50 | 11.73  | 2.015 | 0.99973 |
| 4332              | 3                    | 5.86                        | 475                   | 57,067                        | 319                                    | 1.489 | 120.14 | 178.89 | 1.489 | 0.99586 |
| 4341              | 11                   | 19.71                       | 70                    | 7,777                         | 1,781                                  | 0.039 | 111.10 | 4.37   | 1.111 | 0.99990 |
| 4342              | 3                    | 5.67                        | 24                    | 1,499                         | 1,752                                  | 0.014 | 62.46  | 0.86   | 1.143 | 0.99998 |
| 4343              | 3                    | 2.37                        | 145                   | 6,274                         | 1,025                                  | 0.141 | 43.27  | 6.12   | 1.007 | 0.99986 |
| 4361              | 3                    | 4.69                        | 51                    | 2,967                         | 797                                    | 0.064 | 58.18  | 3.72   | 1.041 | 0.99991 |
| 4363              | 5                    | 14.89                       | 25                    | 4,162                         | 1,691                                  | 0.015 | 166.48 | 2.46   | 1.087 | 0.99994 |
| 4371              | 3                    | 3.96                        | 31                    | 3,219                         | 1,543                                  | 0.020 | 103.84 | 2.09   | 1.033 | 0.99995 |
| 4372              | 3                    | 1.68                        | 15                    | 674                           | 440                                    | 0.034 | 44.93  | 1.53   | 1.071 | 0.99996 |
| 4373              | 4                    | 10.69                       | 554                   | 105,842                       | 776                                    | 0.714 | 191.05 | 136.39 | 1.086 | 0.99684 |
| 4385              | 2                    | 3.50                        | 1,117                 | 46,743                        | 1,122                                  | 0.996 | 41.85  | 41.66  | 1.001 | 0.99904 |
| 4431              | 10                   | 11.49                       | 2,812                 | 373,542                       | 1,387                                  | 2.027 | 132.84 | 269.32 | 2.032 | 0.99377 |
| 4432              | 6                    | 26.08                       | 928                   | 124,037                       | 462                                    | 2.009 | 133.66 | 268.48 | 2.009 | 0.99379 |
| 4513              | 1                    | 1.87                        | 1                     | 112                           | 682                                    | 0.001 | 112.00 | 0.16   | 1.000 | 0.99999 |
| 4601              | 4                    | 5.04                        | 101                   | 6,933                         | 414                                    | 0.244 | 68.64  | 16.75  | 1.020 | 0.99961 |
| 4602              | 8                    | 15.26                       | 91                    | 5,775                         | 947                                    | 0.096 | 63.46  | 6.10   | 1.058 | 0.99986 |
| 4692              | 1                    | 4.85                        | 1                     | 291                           | 470                                    | 0.002 | 291.00 | 0.62   | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 4714              | 3                    | 2.99                        | 3                     | 179                           | 328                                    | 0.009 | 59.67  | 0.55  | 1.000 | 0.99999 |
| 5601              | 3                    | 11.53                       | 27                    | 7,838                         | 1,163                                  | 0.023 | 290.30 | 6.74  | 1.000 | 0.99984 |
| 5602              | 3                    | 6.34                        | 3                     | 381                           | 681                                    | 0.004 | 127.00 | 0.56  | 1.000 | 0.99999 |
| 5603              | 7                    | 29.99                       | 82                    | 16,429                        | 1,290                                  | 0.064 | 200.35 | 12.74 | 1.038 | 0.99971 |
| 5902              | 1                    | 1.00                        | 15                    | 900                           | 1,012                                  | 0.015 | 60.00  | 0.89  | 1.000 | 0.99998 |
| 5904              | 2                    | 2.75                        | 2                     | 165                           | 1,223                                  | 0.002 | 82.50  | 0.13  | 1.000 | 0.99999 |
| 5905              | 5                    | 3.41                        | 82                    | 4,321                         | 1,876                                  | 0.044 | 52.70  | 2.30  | 1.025 | 0.99995 |
| 6021              | 1                    | 1.20                        | 1                     | 72                            | 1,275                                  | 0.001 | 72.00  | 0.06  | 1.000 | 0.99999 |
| 6022              | 1                    | 7.25                        | 1                     | 435                           | 490                                    | 0.002 | 435.00 | 0.89  | 1.000 | 0.99998 |
| 6141              | 1                    | 1.47                        | 2                     | 176                           | 636                                    | 0.003 | 88.00  | 0.28  | 1.000 | 0.99999 |
| 6142              | 1                    | 2.28                        | 1                     | 137                           | 309                                    | 0.003 | 137.00 | 0.44  | 1.000 | 0.99999 |
| 6144              | 1                    | 0.53                        | 1                     | 32                            | 317                                    | 0.003 | 32.00  | 0.10  | 1.000 | 0.99999 |
|                   | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL<br>CUSTOMERS<br>SERVED           | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
| Total:            | 497                  | 1,486.58                    | 35,799                | 4,995,911                     | 164,936                                | 0.217 | 139.55 | 30.29 | 1.673 | 0.99930 |

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

4/1/2017 to 4/30/2017

EXCLUDING MAJOR EVENT DAYS

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 1050              | 4                    | 6.31                        | 13                    | 1,462                         | 1,597                                  | 0.008 | 112.46 | 0.92  | 1.000 | 0.99998 |
| 1082              | 6                    | 14.01                       | 22                    | 3,006                         | 1,330                                  | 0.017 | 136.64 | 2.26  | 1.100 | 0.99994 |
| 1092              | 6                    | 14.33                       | 6                     | 860                           | 971                                    | 0.006 | 143.33 | 0.89  | 1.000 | 0.99998 |
| 1093              | 1                    | 0.52                        | 28                    | 880                           | 239                                    | 0.117 | 31.43  | 3.68  | 1.000 | 0.99991 |
| 1141              | 2                    | 4.82                        | 2                     | 289                           | 902                                    | 0.002 | 144.50 | 0.32  | 1.000 | 0.99999 |
| 1142              | 1                    | 1.22                        | 1                     | 73                            | 214                                    | 0.005 | 73.00  | 0.34  | 1.000 | 0.99999 |
| 1211              | 5                    | 5.65                        | 5                     | 339                           | 1,479                                  | 0.003 | 67.80  | 0.23  | 1.250 | 0.99999 |
| 1212              | 1                    | 0.87                        | 3                     | 156                           | 332                                    | 0.009 | 52.00  | 0.47  | 1.000 | 0.99999 |
| 1213              | 4                    | 7.61                        | 61                    | 15,817                        | 554                                    | 0.110 | 259.30 | 28.55 | 1.000 | 0.99929 |
| 1230              | 2                    | 4.45                        | 49                    | 11,231                        | 1,177                                  | 0.042 | 229.20 | 9.54  | 1.021 | 0.99976 |
| 1233              | 1                    | 0.62                        | 640                   | 23,840                        | 640                                    | 1.000 | 37.25  | 37.25 | 1.000 | 0.99908 |
| 1241              | 1                    | 1.00                        | 1                     | 60                            | 853                                    | 0.001 | 60.00  | 0.07  | 1.000 | 0.99999 |
| 1242              | 1                    | 0.52                        | 1                     | 31                            | 680                                    | 0.001 | 31.00  | 0.05  | 1.000 | 0.99999 |
| 1243              | 2                    | 2.26                        | 6                     | 304                           | 1,199                                  | 0.005 | 50.67  | 0.25  | 1.000 | 0.99999 |
| 1265              | 1                    | 3.10                        | 124                   | 23,088                        | 1,282                                  | 0.097 | 186.19 | 18.01 | 1.000 | 0.99955 |
| 1271              | 1                    | 1.03                        | 10                    | 623                           | 962                                    | 0.010 | 62.30  | 0.65  | 1.000 | 0.99998 |
| 1284              | 1                    | 1.15                        | 65                    | 4,519                         | 948                                    | 0.069 | 69.52  | 4.77  | 1.000 | 0.99988 |



| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 1285              | 1                    | 1.77                        | 21                    | 2,226                         | 1,094                                  | 0.019 | 106.00 | 2.03   | 1.000 | 0.99995 |
| 1312              | 2                    | 1.78                        | 16                    | 622                           | 933                                    | 0.017 | 38.88  | 0.67   | 1.000 | 0.99998 |
| 1452              | 3                    | 5.37                        | 3                     | 322                           | 449                                    | 0.007 | 107.33 | 0.72   | 1.000 | 0.99998 |
| 1453              | 3                    | 1.73                        | 3                     | 104                           | 1,797                                  | 0.002 | 34.67  | 0.06   | 1.500 | 0.99999 |
| 1455              | 1                    | 5.32                        | 1                     | 319                           | 389                                    | 0.003 | 319.00 | 0.82   | 1.000 | 0.99998 |
| 1521              | 2                    | 1.78                        | 72                    | 5,753                         | 361                                    | 0.199 | 79.90  | 15.94  | 1.014 | 0.99960 |
| 1523              | 2                    | 2.83                        | 54                    | 5,810                         | 723                                    | 0.075 | 107.59 | 8.04   | 1.102 | 0.99980 |
| 1842              | 3                    | 42.25                       | 3                     | 2,535                         | 281                                    | 0.011 | 845.00 | 9.02   | 1.000 | 0.99978 |
| 1843              | 19                   | 164.22                      | 479                   | 218,789                       | 1,086                                  | 0.441 | 456.76 | 201.46 | 1.000 | 0.99500 |
| 2051              | 2                    | 1.75                        | 10                    | 622                           | 165                                    | 0.061 | 62.20  | 3.77   | 1.000 | 0.99991 |
| 2052              | 4                    | 5.65                        | 33                    | 5,614                         | 85                                     | 0.388 | 170.12 | 66.05  | 1.031 | 0.99836 |
| 2092              | 1                    | 1.53                        | 1                     | 92                            | 917                                    | 0.001 | 92.00  | 0.10   | 1.000 | 0.99999 |
| 2171              | 3                    | 3.94                        | 3                     | 236                           | 564                                    | 0.005 | 78.67  | 0.42   | 1.000 | 0.99999 |
| 2172              | 1                    | 1.73                        | 1                     | 104                           | 223                                    | 0.004 | 104.00 | 0.47   | 1.000 | 0.99999 |
| 2211              | 1                    | 0.60                        | 47                    | 1,720                         | 723                                    | 0.065 | 36.60  | 2.38   | 1.000 | 0.99994 |
| 2212              | 1                    | 1.23                        | 1                     | 74                            | 1,294                                  | 0.001 | 74.00  | 0.06   | 1.000 | 0.99999 |
| 2501              | 1                    | 0.90                        | 1                     | 54                            | 84                                     | 0.012 | 54.00  | 0.64   | 1.000 | 0.99998 |
| 2511              | 1                    | 1.63                        | 1                     | 98                            | 618                                    | 0.002 | 98.00  | 0.16   | 1.000 | 0.99999 |
| 2621              | 2                    | 5.24                        | 2                     | 314                           | 1,166                                  | 0.002 | 157.00 | 0.27   | 1.000 | 0.99999 |
| 2921              | 1                    | 0.78                        | 1                     | 47                            | 375                                    | 0.003 | 47.00  | 0.13   | 1.000 | 0.99999 |
| 2951              | 7                    | 18.84                       | 56                    | 9,145                         | 1,395                                  | 0.040 | 163.30 | 6.56   | 1.120 | 0.99984 |
| 2952              | 2                    | 2.43                        | 2                     | 146                           | 154                                    | 0.013 | 73.00  | 0.95   | 1.000 | 0.99998 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI   | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|---------|--------|-------|---------|
| 2961              | 5                    | 61.89                       | 35                    | 13,470                        | 648                                    | 0.054 | 384.86  | 20.79  | 1.094 | 0.99948 |
| 2962              | 1                    | 28.97                       | 1                     | 1,738                         | 257                                    | 0.004 | 1738.00 | 6.76   | 1.000 | 0.99983 |
| 3041              | 1                    | 0.70                        | 46                    | 1,935                         | 80                                     | 0.575 | 42.07   | 24.19  | 1.000 | 0.99940 |
| 3081              | 1                    | 1.37                        | 1                     | 82                            | 573                                    | 0.002 | 82.00   | 0.14   | 1.000 | 0.99999 |
| 3122              | 5                    | 12.68                       | 38                    | 6,965                         | 849                                    | 0.045 | 183.29  | 8.20   | 1.056 | 0.99980 |
| 3123              | 1                    | 1.42                        | 7                     | 600                           | 1,050                                  | 0.007 | 85.71   | 0.57   | 1.000 | 0.99999 |
| 3181              | 2                    | 2.12                        | 2                     | 127                           | 724                                    | 0.003 | 63.50   | 0.18   | 1.000 | 0.99999 |
| 3221              | 7                    | 14.53                       | 2,548                 | 170,033                       | 1,241                                  | 2.053 | 66.73   | 137.01 | 2.053 | 0.99660 |
| 3222              | 2                    | 3.78                        | 772                   | 66,999                        | 771                                    | 1.001 | 86.79   | 86.90  | 1.001 | 0.99784 |
| 3232              | 1                    | 1.97                        | 13                    | 1,545                         | 427                                    | 0.030 | 118.85  | 3.62   | 1.000 | 0.99991 |
| 3303              | 1                    | 1.08                        | 1                     | 65                            | 979                                    | 0.001 | 65.00   | 0.07   | 1.000 | 0.99999 |
| 3311              | 1                    | 0.62                        | 1                     | 37                            | 534                                    | 0.002 | 37.00   | 0.07   | 1.000 | 0.99999 |
| 3314              | 2                    | 1.30                        | 21                    | 452                           | 222                                    | 0.095 | 21.52   | 2.04   | 1.050 | 0.99995 |
| 3315              | 7                    | 9.93                        | 1,738                 | 121,480                       | 1,579                                  | 1.101 | 69.90   | 76.93  | 4.685 | 0.99809 |
| 3422              | 1                    | 0.92                        | 1                     | 55                            | 971                                    | 0.001 | 55.00   | 0.06   | 1.000 | 0.99999 |
| 3423              | 3                    | 3.62                        | 3                     | 217                           | 386                                    | 0.008 | 72.33   | 0.56   | 1.000 | 0.99999 |
| 3471              | 1                    | 0.60                        | 1                     | 36                            | 170                                    | 0.006 | 36.00   | 0.21   | 1.000 | 0.99999 |
| 3472              | 11                   | 42.04                       | 3,165                 | 106,551                       | 1,580                                  | 2.003 | 33.67   | 67.44  | 2.006 | 0.99833 |
| 3552              | 1                    | 1.23                        | 20                    | 1,487                         | 575                                    | 0.035 | 74.35   | 2.59   | 1.000 | 0.99994 |
| 3553              | 3                    | 4.85                        | 3                     | 291                           | 1,045                                  | 0.003 | 97.00   | 0.28   | 1.000 | 0.99999 |
| 3591              | 2                    | 8.07                        | 26                    | 6,310                         | 1,202                                  | 0.022 | 242.69  | 5.25   | 2.000 | 0.99987 |
| 3592              | 3                    | 5.76                        | 8                     | 867                           | 1,747                                  | 0.005 | 108.38  | 0.50   | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI   | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|---------|--------|-------|---------|
| 3594              | 4                    | 5.02                        | 20                    | 1,261                         | 680                                    | 0.029 | 63.05   | 1.85   | 1.053 | 0.99995 |
| 3621              | 7                    | 14.61                       | 65                    | 3,164                         | 1,552                                  | 0.042 | 48.68   | 2.04   | 1.016 | 0.99995 |
| 3661              | 2                    | 3.47                        | 9                     | 383                           | 1,022                                  | 0.009 | 42.56   | 0.37   | 1.000 | 0.99999 |
| 3662              | 2                    | 1.45                        | 2                     | 87                            | 779                                    | 0.003 | 43.50   | 0.11   | 1.000 | 0.99999 |
| 3663              | 3                    | 4.08                        | 20                    | 2,227                         | 734                                    | 0.027 | 111.35  | 3.03   | 1.111 | 0.99992 |
| 3664              | 1                    | 0.38                        | 1                     | 23                            | 549                                    | 0.002 | 23.00   | 0.04   | 1.000 | 0.99999 |
| 3673              | 1                    | 4.63                        | 1                     | 278                           | 267                                    | 0.004 | 278.00  | 1.04   | 1.000 | 0.99997 |
| 3691              | 1                    | 2.95                        | 5                     | 885                           | 1,163                                  | 0.004 | 177.00  | 0.76   | 1.000 | 0.99998 |
| 3751              | 8                    | 110.71                      | 46                    | 46,505                        | 882                                    | 0.052 | 1010.98 | 52.73  | 1.000 | 0.99869 |
| 3871              | 1                    | 0.83                        | 1                     | 50                            | 1,387                                  | 0.001 | 50.00   | 0.04   | 1.000 | 0.99999 |
| 3872              | 4                    | 5.01                        | 58                    | 4,378                         | 1,067                                  | 0.054 | 75.48   | 4.10   | 2.071 | 0.99990 |
| 3878              | 2                    | 2.82                        | 41                    | 3,475                         | 792                                    | 0.052 | 84.76   | 4.39   | 1.000 | 0.99989 |
| 3891              | 2                    | 1.19                        | 2                     | 71                            | 455                                    | 0.004 | 35.50   | 0.16   | 1.000 | 0.99999 |
| 3892              | 1                    | 1.35                        | 1                     | 81                            | 503                                    | 0.002 | 81.00   | 0.16   | 1.000 | 0.99999 |
| 3893              | 8                    | 15.67                       | 731                   | 115,716                       | 1,111                                  | 0.658 | 158.30  | 104.15 | 1.229 | 0.99742 |
| 3901              | 1                    | 0.40                        | 1                     | 24                            | 874                                    | 0.001 | 24.00   | 0.03   | 1.000 | 0.99999 |
| 3903              | 1                    | 1.40                        | 28                    | 2,367                         | 298                                    | 0.094 | 84.54   | 7.94   | 1.000 | 0.99980 |
| 3913              | 1                    | 1.57                        | 2                     | 189                           | 810                                    | 0.002 | 94.50   | 0.23   | 1.000 | 0.99999 |
| 3951              | 6                    | 5.85                        | 896                   | 70,365                        | 929                                    | 0.964 | 78.53   | 75.74  | 1.006 | 0.99812 |
| 3952              | 2                    | 2.01                        | 18                    | 982                           | 1,273                                  | 0.014 | 54.56   | 0.77   | 1.059 | 0.99998 |
| 3953              | 3                    | 3.74                        | 3                     | 224                           | 521                                    | 0.006 | 74.67   | 0.43   | 1.000 | 0.99999 |
| 3981              | 9                    | 45.03                       | 65                    | 14,551                        | 1,503                                  | 0.043 | 223.86  | 9.68   | 1.083 | 0.99976 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 3982              | 9                    | 24.70                       | 249                   | 25,163                        | 1,769                                  | 0.141 | 101.06 | 14.22  | 1.012 | 0.99965 |
| 3991              | 10                   | 32.69                       | 49                    | 3,900                         | 726                                    | 0.067 | 79.59  | 5.37   | 1.167 | 0.99987 |
| 4031              | 2                    | 3.80                        | 717                   | 112,207                       | 704                                    | 1.018 | 156.50 | 159.38 | 1.018 | 0.99605 |
| 4091              | 1                    | 1.08                        | 26                    | 1,714                         | 1,148                                  | 0.023 | 65.92  | 1.49   | 1.000 | 0.99996 |
| 4092              | 2                    | 3.51                        | 12                    | 1,291                         | 434                                    | 0.028 | 107.58 | 2.97   | 1.000 | 0.99993 |
| 4101              | 1                    | 3.95                        | 9                     | 2,139                         | 589                                    | 0.015 | 237.67 | 3.63   | 1.000 | 0.99991 |
| 4102              | 1                    | 2.02                        | 1                     | 121                           | 903                                    | 0.001 | 121.00 | 0.13   | 1.000 | 0.99999 |
| 4136              | 2                    | 3.54                        | 669                   | 68,383                        | 669                                    | 1.000 | 102.22 | 102.22 | 1.379 | 0.99746 |
| 4138              | 2                    | 1.28                        | 13                    | 503                           | 745                                    | 0.017 | 38.69  | 0.68   | 1.000 | 0.99998 |
| 4142              | 2                    | 4.90                        | 13                    | 2,194                         | 597                                    | 0.022 | 168.77 | 3.68   | 1.000 | 0.99991 |
| 4151              | 1                    | 0.78                        | 35                    | 1,647                         | 1,246                                  | 0.028 | 47.06  | 1.32   | 1.000 | 0.99997 |
| 4153              | 1                    | 1.08                        | 1                     | 65                            | 1,285                                  | 0.001 | 65.00  | 0.05   | 1.000 | 0.99999 |
| 4155              | 2                    | 1.63                        | 2                     | 98                            | 2,133                                  | 0.001 | 49.00  | 0.05   | 1.000 | 0.99999 |
| 4172              | 1                    | 0.30                        | 103                   | 1,874                         | 1,726                                  | 0.060 | 18.19  | 1.09   | 1.000 | 0.99997 |
| 4182              | 1                    | 0.73                        | 1                     | 44                            | 891                                    | 0.001 | 44.00  | 0.05   | 1.000 | 0.99999 |
| 4212              | 7                    | 11.28                       | 1,274                 | 43,370                        | 819                                    | 1.556 | 34.04  | 52.95  | 1.556 | 0.99869 |
| 4222              | 2                    | 2.75                        | 18                    | 747                           | 1,045                                  | 0.017 | 41.50  | 0.71   | 1.059 | 0.99998 |
| 4302              | 1                    | 2.78                        | 1                     | 167                           | 651                                    | 0.002 | 167.00 | 0.26   | 1.000 | 0.99999 |
| 4303              | 1                    | 6.18                        | 1                     | 371                           | 982                                    | 0.001 | 371.00 | 0.38   | 1.000 | 0.99999 |
| 4313              | 2                    | 2.35                        | 14                    | 599                           | 535                                    | 0.026 | 42.79  | 1.12   | 1.000 | 0.99997 |
| 4324              | 3                    | 4.31                        | 137                   | 14,727                        | 1,255                                  | 0.109 | 107.50 | 11.73  | 2.015 | 0.99971 |
| 4332              | 3                    | 5.86                        | 475                   | 57,067                        | 319                                    | 1.489 | 120.14 | 178.89 | 1.489 | 0.99556 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 4341              | 11                   | 19.71                       | 70                    | 7,777                         | 1,781                                  | 0.039 | 111.10 | 4.37   | 1.111 | 0.99989 |
| 4342              | 1                    | 0.92                        | 21                    | 1,155                         | 1,752                                  | 0.012 | 55.00  | 0.66   | 1.000 | 0.99998 |
| 4343              | 3                    | 2.37                        | 145                   | 6,274                         | 1,025                                  | 0.141 | 43.27  | 6.12   | 1.007 | 0.99985 |
| 4361              | 1                    | 0.92                        | 49                    | 2,741                         | 797                                    | 0.061 | 55.94  | 3.44   | 1.000 | 0.99991 |
| 4363              | 3                    | 6.57                        | 3                     | 394                           | 1,691                                  | 0.002 | 131.33 | 0.23   | 1.000 | 0.99999 |
| 4371              | 3                    | 3.96                        | 31                    | 3,219                         | 1,543                                  | 0.020 | 103.84 | 2.09   | 1.033 | 0.99995 |
| 4372              | 3                    | 1.68                        | 15                    | 674                           | 440                                    | 0.034 | 44.93  | 1.53   | 1.071 | 0.99996 |
| 4373              | 4                    | 10.69                       | 554                   | 105,842                       | 776                                    | 0.714 | 191.05 | 136.39 | 1.086 | 0.99662 |
| 4385              | 1                    | 0.68                        | 1,116                 | 46,574                        | 1,122                                  | 0.995 | 41.73  | 41.51  | 1.000 | 0.99897 |
| 4431              | 5                    | 7.25                        | 1,424                 | 124,347                       | 1,387                                  | 1.027 | 87.32  | 89.65  | 1.029 | 0.99778 |
| 4432              | 4                    | 20.78                       | 465                   | 40,893                        | 462                                    | 1.006 | 87.94  | 88.51  | 1.006 | 0.99780 |
| 4513              | 1                    | 1.87                        | 1                     | 112                           | 682                                    | 0.001 | 112.00 | 0.16   | 1.000 | 0.99999 |
| 4601              | 4                    | 5.04                        | 101                   | 6,933                         | 414                                    | 0.244 | 68.64  | 16.75  | 1.020 | 0.99958 |
| 4602              | 8                    | 15.26                       | 91                    | 5,775                         | 947                                    | 0.096 | 63.46  | 6.10   | 1.058 | 0.99985 |
| 4692              | 1                    | 4.85                        | 1                     | 291                           | 470                                    | 0.002 | 291.00 | 0.62   | 1.000 | 0.99998 |
| 4714              | 2                    | 1.22                        | 2                     | 73                            | 328                                    | 0.006 | 36.50  | 0.22   | 1.000 | 0.99999 |
| 5601              | 3                    | 11.53                       | 27                    | 7,838                         | 1,163                                  | 0.023 | 290.30 | 6.74   | 1.000 | 0.99983 |
| 5602              | 3                    | 6.34                        | 3                     | 381                           | 681                                    | 0.004 | 127.00 | 0.56   | 1.000 | 0.99999 |
| 5603              | 7                    | 29.99                       | 82                    | 16,429                        | 1,290                                  | 0.064 | 200.35 | 12.74  | 1.038 | 0.99968 |
| 5902              | 1                    | 1.00                        | 15                    | 900                           | 1,012                                  | 0.015 | 60.00  | 0.89   | 1.000 | 0.99998 |
| 5905              | 5                    | 3.41                        | 82                    | 4,321                         | 1,876                                  | 0.044 | 52.70  | 2.30   | 1.025 | 0.99994 |
| 6021              | 1                    | 1.20                        | 1                     | 72                            | 1,275                                  | 0.001 | 72.00  | 0.06   | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 6022              | 1                    | 7.25                        | 1                     | 435                           | 490                                    | 0.002 | 435.00 | 0.89  | 1.000 | 0.99998 |
| 6141              | 1                    | 1.47                        | 2                     | 176                           | 636                                    | 0.003 | 88.00  | 0.28  | 1.000 | 0.99999 |
| 6142              | 1                    | 2.28                        | 1                     | 137                           | 309                                    | 0.003 | 137.00 | 0.44  | 1.000 | 0.99999 |
| 6144              | 1                    | 0.53                        | 1                     | 32                            | 317                                    | 0.003 | 32.00  | 0.10  | 1.000 | 0.99999 |
|                   | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL<br>CUSTOMERS<br>SERVED           | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
| Total:            | 371                  | 1,076.66                    | 20,439                | 1,832,138                     | 164,936                                | 0.124 | 89.64  | 11.11 | 1.353 | 0.99972 |

**THE EMPIRE DISTRICT ELECTRIC COMPANY**  
**CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI**  
5/1/2017 to 5/31/2017  
INCLUDING MAJOR EVENT DAYS

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 1050              | 8                    | 13.90                       | 115                   | 9,919                         | 1,597                                  | 0.072 | 86.25  | 6.21  | 1.045 | 0.99986 |
| 1051              | 2                    | 5.65                        | 2                     | 339                           | 1,067                                  | 0.002 | 169.50 | 0.32  | 1.000 | 0.99999 |
| 1082              | 9                    | 16.65                       | 141                   | 18,668                        | 1,330                                  | 0.106 | 132.40 | 14.04 | 1.294 | 0.99969 |
| 1092              | 5                    | 7.58                        | 62                    | 3,478                         | 971                                    | 0.064 | 56.10  | 3.58  | 1.192 | 0.99992 |
| 1094              | 5                    | 6.70                        | 73                    | 5,344                         | 1,237                                  | 0.059 | 73.21  | 4.32  | 1.000 | 0.99990 |
| 1141              | 1                    | 1.05                        | 902                   | 57,637                        | 902                                    | 1.000 | 63.90  | 63.90 | 1.000 | 0.99857 |
| 1142              | 2                    | 6.85                        | 229                   | 18,814                        | 214                                    | 1.070 | 82.16  | 87.92 | 1.070 | 0.99803 |
| 1211              | 3                    | 3.11                        | 29                    | 1,645                         | 1,479                                  | 0.020 | 56.72  | 1.11  | 1.000 | 0.99998 |
| 1212              | 2                    | 1.82                        | 3                     | 165                           | 332                                    | 0.009 | 55.00  | 0.50  | 1.000 | 0.99999 |
| 1213              | 3                    | 2.55                        | 12                    | 735                           | 554                                    | 0.022 | 61.25  | 1.33  | 1.091 | 0.99997 |
| 1230              | 2                    | 2.87                        | 19                    | 2,336                         | 1,177                                  | 0.016 | 122.95 | 1.98  | 1.000 | 0.99996 |
| 1232              | 6                    | 10.67                       | 1,254                 | 52,337                        | 1,183                                  | 1.060 | 41.74  | 44.24 | 1.060 | 0.99901 |
| 1233              | 2                    | 2.07                        | 2                     | 124                           | 640                                    | 0.003 | 62.00  | 0.19  | 1.000 | 0.99999 |
| 1241              | 3                    | 5.79                        | 15                    | 3,561                         | 853                                    | 0.018 | 237.40 | 4.17  | 1.000 | 0.99991 |
| 1263              | 4                    | 5.55                        | 362                   | 35,742                        | 1,138                                  | 0.318 | 98.73  | 31.41 | 1.000 | 0.99930 |
| 1265              | 2                    | 3.50                        | 172                   | 17,819                        | 1,282                                  | 0.134 | 103.60 | 13.90 | 1.000 | 0.99969 |
| 1271              | 5                    | 7.28                        | 17                    | 1,813                         | 962                                    | 0.018 | 106.65 | 1.88  | 1.308 | 0.99996 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 1273              | 5                    | 13.18                       | 14                    | 2,459                         | 865                                    | 0.016 | 175.64 | 2.84   | 1.000 | 0.99994 |
| 1282              | 3                    | 3.59                        | 279                   | 20,088                        | 693                                    | 0.403 | 72.00  | 28.99  | 1.000 | 0.99935 |
| 1311              | 4                    | 11.09                       | 10                    | 1,657                         | 272                                    | 0.037 | 165.70 | 6.09   | 1.250 | 0.99986 |
| 1312              | 10                   | 19.79                       | 1,893                 | 183,101                       | 933                                    | 2.029 | 96.73  | 196.25 | 2.029 | 0.99560 |
| 1451              | 5                    | 7.71                        | 568                   | 56,963                        | 526                                    | 1.080 | 100.29 | 108.29 | 1.080 | 0.99757 |
| 1452              | 2                    | 2.41                        | 450                   | 47,141                        | 449                                    | 1.002 | 104.76 | 104.99 | 1.002 | 0.99765 |
| 1453              | 6                    | 11.75                       | 1,934                 | 191,576                       | 1,797                                  | 1.076 | 99.06  | 106.61 | 1.076 | 0.99761 |
| 1454              | 6                    | 7.97                        | 1,140                 | 109,069                       | 935                                    | 1.219 | 95.67  | 116.65 | 1.219 | 0.99739 |
| 1455              | 3                    | 7.46                        | 391                   | 41,265                        | 389                                    | 1.005 | 105.54 | 106.08 | 1.005 | 0.99762 |
| 1521              | 5                    | 14.32                       | 18                    | 3,195                         | 361                                    | 0.050 | 177.50 | 8.85   | 1.059 | 0.99980 |
| 1523              | 4                    | 3.31                        | 25                    | 1,087                         | 723                                    | 0.035 | 43.48  | 1.50   | 1.042 | 0.99997 |
| 1841              | 2                    | 2.80                        | 2                     | 168                           | 650                                    | 0.003 | 84.00  | 0.26   | 1.000 | 0.99999 |
| 1843              | 8                    | 28.50                       | 67                    | 15,507                        | 1,086                                  | 0.062 | 231.45 | 14.28  | 1.047 | 0.99968 |
| 2051              | 5                    | 18.15                       | 27                    | 7,806                         | 165                                    | 0.164 | 289.11 | 47.31  | 1.000 | 0.99894 |
| 2052              | 9                    | 25.43                       | 179                   | 17,273                        | 85                                     | 2.106 | 96.50  | 203.21 | 4.068 | 0.99545 |
| 2091              | 2                    | 2.37                        | 885                   | 51,799                        | 880                                    | 1.006 | 58.53  | 58.86  | 1.006 | 0.99868 |
| 2092              | 1                    | 1.85                        | 1                     | 111                           | 917                                    | 0.001 | 111.00 | 0.12   | 1.000 | 0.99999 |
| 2211              | 5                    | 12.24                       | 760                   | 325,425                       | 723                                    | 1.051 | 428.19 | 450.10 | 1.051 | 0.98992 |
| 2212              | 2                    | 12.48                       | 1,286                 | 745,020                       | 1,294                                  | 0.994 | 579.33 | 575.75 | 1.001 | 0.98710 |
| 2511              | 4                    | 8.69                        | 8                     | 1,050                         | 618                                    | 0.013 | 131.25 | 1.70   | 1.000 | 0.99996 |
| 2621              | 5                    | 8.93                        | 45                    | 4,467                         | 1,166                                  | 0.039 | 99.27  | 3.83   | 1.154 | 0.99991 |
| 2622              | 1                    | 2.43                        | 7                     | 1,023                         | 113                                    | 0.062 | 146.14 | 9.05   | 1.000 | 0.99980 |



| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 2921              | 2                    | 2.35                        | 376                   | 21,166                        | 375                                    | 1.003 | 56.29  | 56.44 | 1.003 | 0.99874 |
| 2951              | 6                    | 11.03                       | 55                    | 3,147                         | 1,395                                  | 0.039 | 57.22  | 2.26  | 1.100 | 0.99995 |
| 2952              | 1                    | 1.00                        | 1                     | 60                            | 154                                    | 0.006 | 60.00  | 0.39  | 1.000 | 0.99999 |
| 2961              | 5                    | 4.70                        | 703                   | 36,966                        | 648                                    | 1.085 | 52.58  | 57.05 | 1.092 | 0.99872 |
| 2962              | 1                    | 0.60                        | 257                   | 9,260                         | 257                                    | 1.000 | 36.03  | 36.03 | 1.000 | 0.99919 |
| 3082              | 1                    | 1.37                        | 28                    | 2,310                         | 322                                    | 0.087 | 82.50  | 7.17  | 1.000 | 0.99984 |
| 3121              | 9                    | 16.63                       | 88                    | 12,770                        | 1,131                                  | 0.078 | 145.11 | 11.29 | 1.011 | 0.99975 |
| 3122              | 3                    | 4.63                        | 74                    | 7,624                         | 849                                    | 0.087 | 103.03 | 8.98  | 1.721 | 0.99980 |
| 3123              | 1                    | 3.50                        | 1                     | 210                           | 1,050                                  | 0.001 | 210.00 | 0.20  | 1.000 | 0.99999 |
| 3221              | 5                    | 5.67                        | 73                    | 4,821                         | 1,241                                  | 0.059 | 66.04  | 3.88  | 1.043 | 0.99991 |
| 3222              | 1                    | 1.28                        | 1                     | 77                            | 771                                    | 0.001 | 77.00  | 0.10  | 1.000 | 0.99999 |
| 3232              | 1                    | 2.08                        | 13                    | 1,635                         | 427                                    | 0.030 | 125.77 | 3.83  | 1.000 | 0.99991 |
| 3302              | 1                    | 2.48                        | 23                    | 3,429                         | 899                                    | 0.026 | 149.09 | 3.81  | 1.000 | 0.99991 |
| 3303              | 7                    | 10.24                       | 394                   | 31,123                        | 979                                    | 0.402 | 78.99  | 31.79 | 1.018 | 0.99929 |
| 3313              | 1                    | 3.00                        | 7                     | 1,264                         | 1,336                                  | 0.005 | 180.57 | 0.95  | 1.000 | 0.99998 |
| 3314              | 1                    | 2.28                        | 1                     | 137                           | 222                                    | 0.005 | 137.00 | 0.62  | 1.000 | 0.99999 |
| 3315              | 2                    | 2.53                        | 720                   | 72,716                        | 1,579                                  | 0.456 | 100.99 | 46.05 | 1.003 | 0.99897 |
| 3421              | 1                    | 4.00                        | 1                     | 240                           | 294                                    | 0.003 | 240.00 | 0.82  | 1.000 | 0.99998 |
| 3422              | 5                    | 8.72                        | 51                    | 6,303                         | 971                                    | 0.053 | 123.59 | 6.49  | 1.020 | 0.99985 |
| 3471              | 1                    | 0.92                        | 1                     | 55                            | 170                                    | 0.006 | 55.00  | 0.32  | 1.000 | 0.99999 |
| 3472              | 2                    | 0.90                        | 20                    | 688                           | 1,580                                  | 0.013 | 34.40  | 0.44  | 1.053 | 0.99999 |
| 3551              | 1                    | 1.47                        | 245                   | 21,560                        | 1,031                                  | 0.238 | 88.00  | 20.91 | 1.000 | 0.99953 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI   | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|---------|--------|-------|---------|
| 3552              | 3                    | 129.08                      | 50                    | 183,819                       | 575                                    | 0.087 | 3676.38 | 319.69 | 1.923 | 0.99284 |
| 3553              | 3                    | 7.06                        | 3                     | 423                           | 1,045                                  | 0.003 | 141.00  | 0.40   | 1.000 | 0.99999 |
| 3591              | 5                    | 8.93                        | 2,410                 | 276,631                       | 1,202                                  | 2.005 | 114.78  | 230.14 | 2.005 | 0.99484 |
| 3592              | 10                   | 23.36                       | 3,563                 | 430,972                       | 1,747                                  | 2.039 | 120.96  | 246.69 | 2.039 | 0.99447 |
| 3593              | 5                    | 8.13                        | 951                   | 68,027                        | 929                                    | 1.024 | 71.53   | 73.23  | 1.024 | 0.99836 |
| 3594              | 2                    | 7.85                        | 33                    | 11,562                        | 680                                    | 0.049 | 350.36  | 17.00  | 1.000 | 0.99962 |
| 3621              | 6                    | 29.15                       | 125                   | 48,108                        | 1,552                                  | 0.081 | 384.86  | 31.00  | 1.016 | 0.99931 |
| 3661              | 1                    | 1.22                        | 1                     | 73                            | 1,022                                  | 0.001 | 73.00   | 0.07   | 1.000 | 0.99999 |
| 3662              | 6                    | 7.77                        | 44                    | 6,701                         | 779                                    | 0.056 | 152.30  | 8.60   | 1.023 | 0.99981 |
| 3663              | 2                    | 2.14                        | 13                    | 1,196                         | 734                                    | 0.018 | 92.00   | 1.63   | 1.083 | 0.99996 |
| 3664              | 4                    | 2.43                        | 43                    | 1,383                         | 549                                    | 0.078 | 32.16   | 2.52   | 1.075 | 0.99994 |
| 3671              | 3                    | 3.35                        | 57                    | 4,977                         | 503                                    | 0.113 | 87.32   | 9.89   | 1.036 | 0.99978 |
| 3672              | 2                    | 1.31                        | 63                    | 2,630                         | 137                                    | 0.460 | 41.75   | 19.20  | 1.000 | 0.99957 |
| 3691              | 5                    | 10.97                       | 56                    | 5,530                         | 1,163                                  | 0.048 | 98.75   | 4.75   | 1.000 | 0.99989 |
| 3692              | 1                    | 1.85                        | 1                     | 111                           | 410                                    | 0.002 | 111.00  | 0.27   | 1.000 | 0.99999 |
| 3694              | 5                    | 6.16                        | 5                     | 370                           | 1,328                                  | 0.004 | 74.00   | 0.28   | 1.000 | 0.99999 |
| 3702              | 1                    | 0.58                        | 1                     | 35                            | 611                                    | 0.002 | 35.00   | 0.06   | 1.000 | 0.99999 |
| 3751              | 7                    | 8.08                        | 1,507                 | 91,445                        | 882                                    | 1.709 | 60.68   | 103.68 | 1.024 | 0.99768 |
| 3871              | 2                    | 3.32                        | 30                    | 4,854                         | 1,387                                  | 0.022 | 161.80  | 3.50   | 1.000 | 0.99992 |
| 3872              | 3                    | 2.57                        | 26                    | 1,314                         | 1,067                                  | 0.024 | 50.54   | 1.23   | 1.000 | 0.99997 |
| 3873              | 2                    | 2.68                        | 797                   | 84,352                        | 796                                    | 1.001 | 105.84  | 105.97 | 1.001 | 0.99763 |
| 3878              | 4                    | 4.54                        | 38                    | 1,627                         | 792                                    | 0.048 | 42.82   | 2.05   | 1.000 | 0.99995 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 3891              | 4                    | 6.83                        | 16                    | 1,159                         | 455                                    | 0.035 | 72.44  | 2.55   | 1.000 | 0.99994 |
| 3893              | 8                    | 20.68                       | 127                   | 18,693                        | 1,111                                  | 0.114 | 147.19 | 16.83  | 1.050 | 0.99962 |
| 3894              | 1                    | 1.95                        | 116                   | 13,670                        | 116                                    | 1.000 | 117.84 | 117.84 | 1.000 | 0.99736 |
| 3901              | 8                    | 11.97                       | 141                   | 13,484                        | 874                                    | 0.161 | 95.63  | 15.43  | 1.060 | 0.99965 |
| 3902              | 2                    | 3.00                        | 2                     | 180                           | 87                                     | 0.023 | 90.00  | 2.07   | 1.000 | 0.99995 |
| 3903              | 3                    | 8.13                        | 3                     | 488                           | 298                                    | 0.010 | 162.67 | 1.64   | 1.000 | 0.99996 |
| 3912              | 2                    | 4.21                        | 920                   | 48,907                        | 1,160                                  | 0.793 | 53.16  | 42.16  | 1.001 | 0.99906 |
| 3913              | 1                    | 0.53                        | 1                     | 32                            | 810                                    | 0.001 | 32.00  | 0.04   | 1.000 | 0.99999 |
| 3914              | 1                    | 7.15                        | 1                     | 429                           | 373                                    | 0.003 | 429.00 | 1.15   | 1.000 | 0.99997 |
| 3951              | 8                    | 16.52                       | 133                   | 16,005                        | 929                                    | 0.143 | 120.34 | 17.23  | 1.039 | 0.99961 |
| 3952              | 10                   | 17.46                       | 109                   | 12,108                        | 1,273                                  | 0.086 | 111.08 | 9.51   | 1.019 | 0.99979 |
| 3953              | 2                    | 2.56                        | 58                    | 4,003                         | 521                                    | 0.111 | 69.02  | 7.68   | 1.018 | 0.99983 |
| 3971              | 2                    | 3.79                        | 125                   | 13,183                        | 665                                    | 0.188 | 105.46 | 19.82  | 1.689 | 0.99956 |
| 3981              | 17                   | 34.19                       | 236                   | 15,762                        | 1,503                                  | 0.157 | 66.79  | 10.49  | 2.314 | 0.99977 |
| 3982              | 12                   | 21.39                       | 2,111                 | 119,536                       | 1,769                                  | 1.193 | 56.63  | 67.57  | 1.193 | 0.99849 |
| 3991              | 6                    | 11.66                       | 52                    | 5,263                         | 726                                    | 0.072 | 101.21 | 7.25   | 1.061 | 0.99984 |
| 4031              | 2                    | 3.10                        | 3                     | 275                           | 704                                    | 0.004 | 91.67  | 0.39   | 1.000 | 0.99999 |
| 4091              | 3                    | 5.72                        | 65                    | 7,453                         | 1,148                                  | 0.057 | 114.66 | 6.49   | 1.000 | 0.99985 |
| 4092              | 2                    | 3.63                        | 487                   | 64,166                        | 434                                    | 1.122 | 131.76 | 147.85 | 1.002 | 0.99669 |
| 4101              | 8                    | 16.72                       | 143                   | 35,320                        | 589                                    | 0.243 | 246.99 | 59.97  | 1.036 | 0.99866 |
| 4132              | 1                    | 5.05                        | 11                    | 3,341                         | 565                                    | 0.019 | 303.73 | 5.91   | 1.000 | 0.99987 |
| 4133              | 1                    | 0.77                        | 1                     | 46                            | 640                                    | 0.002 | 46.00  | 0.07   | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 4134              | 5                    | 5.42                        | 5                     | 326                           | 835                                    | 0.006 | 65.20  | 0.39   | 1.000 | 0.99999 |
| 4136              | 3                    | 7.79                        | 33                    | 4,283                         | 669                                    | 0.049 | 129.79 | 6.40   | 1.065 | 0.99986 |
| 4138              | 1                    | 1.57                        | 1                     | 94                            | 745                                    | 0.001 | 94.00  | 0.13   | 1.000 | 0.99999 |
| 4141              | 1                    | 1.02                        | 1                     | 61                            | 82                                     | 0.012 | 61.00  | 0.74   | 1.000 | 0.99998 |
| 4142              | 4                    | 3.48                        | 89                    | 6,338                         | 597                                    | 0.149 | 71.21  | 10.62  | 1.023 | 0.99976 |
| 4151              | 4                    | 3.27                        | 172                   | 10,723                        | 1,246                                  | 0.138 | 62.34  | 8.61   | 1.012 | 0.99981 |
| 4152              | 3                    | 6.10                        | 19                    | 1,534                         | 820                                    | 0.023 | 80.74  | 1.87   | 1.000 | 0.99996 |
| 4153              | 6                    | 6.10                        | 88                    | 5,393                         | 1,285                                  | 0.068 | 61.28  | 4.20   | 1.000 | 0.99991 |
| 4154              | 2                    | 1.78                        | 2                     | 107                           | 1,209                                  | 0.002 | 53.50  | 0.09   | 1.000 | 0.99999 |
| 4155              | 3                    | 4.64                        | 51                    | 4,473                         | 2,133                                  | 0.024 | 87.71  | 2.10   | 1.085 | 0.99995 |
| 4172              | 5                    | 2.42                        | 1,745                 | 12,946                        | 1,726                                  | 1.011 | 7.42   | 7.50   | 1.012 | 0.99983 |
| 4173              | 5                    | 7.59                        | 130                   | 13,118                        | 634                                    | 0.205 | 100.91 | 20.69  | 1.057 | 0.99954 |
| 4181              | 1                    | 1.55                        | 9                     | 842                           | 625                                    | 0.014 | 93.56  | 1.35   | 1.000 | 0.99997 |
| 4182              | 4                    | 3.28                        | 56                    | 2,582                         | 891                                    | 0.063 | 46.11  | 2.90   | 1.333 | 0.99994 |
| 4211              | 1                    | 5.78                        | 1                     | 347                           | 707                                    | 0.001 | 347.00 | 0.49   | 1.000 | 0.99999 |
| 4212              | 2                    | 5.97                        | 9                     | 764                           | 819                                    | 0.011 | 84.89  | 0.93   | 1.000 | 0.99998 |
| 4222              | 1                    | 0.28                        | 1                     | 17                            | 1,045                                  | 0.001 | 17.00  | 0.02   | 1.000 | 0.99999 |
| 4223              | 1                    | 1.02                        | 3                     | 183                           | 828                                    | 0.004 | 61.00  | 0.22   | 1.000 | 0.99999 |
| 4302              | 1                    | 1.20                        | 101                   | 7,302                         | 651                                    | 0.155 | 72.30  | 11.22  | 1.000 | 0.99975 |
| 4303              | 3                    | 12.87                       | 586                   | 168,753                       | 982                                    | 0.597 | 287.97 | 171.85 | 1.003 | 0.99615 |
| 4311              | 1                    | 1.42                        | 15                    | 1,288                         | 838                                    | 0.018 | 85.87  | 1.54   | 1.000 | 0.99997 |
| 4312              | 2                    | 0.80                        | 25                    | 640                           | 844                                    | 0.030 | 25.60  | 0.76   | 1.000 | 0.99998 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 4313              | 1                    | 0.50                        | 12                    | 364                           | 535                                    | 0.022 | 30.33  | 0.68   | 1.000 | 0.99998 |
| 4324              | 1                    | 0.83                        | 68                    | 3,366                         | 1,255                                  | 0.054 | 49.50  | 2.68   | 1.000 | 0.99994 |
| 4341              | 8                    | 14.24                       | 44                    | 4,057                         | 1,781                                  | 0.025 | 92.20  | 2.28   | 1.100 | 0.99995 |
| 4342              | 5                    | 6.05                        | 99                    | 5,154                         | 1,752                                  | 0.057 | 52.06  | 2.94   | 1.151 | 0.99993 |
| 4343              | 4                    | 6.43                        | 65                    | 7,001                         | 1,025                                  | 0.063 | 107.71 | 6.83   | 1.000 | 0.99985 |
| 4361              | 2                    | 3.67                        | 2                     | 220                           | 797                                    | 0.003 | 110.00 | 0.28   | 1.000 | 0.99999 |
| 4362              | 1                    | 1.07                        | 36                    | 2,332                         | 828                                    | 0.043 | 64.78  | 2.82   | 1.000 | 0.99994 |
| 4363              | 8                    | 11.90                       | 130                   | 9,827                         | 1,691                                  | 0.077 | 75.59  | 5.81   | 1.383 | 0.99987 |
| 4371              | 7                    | 13.54                       | 44                    | 1,903                         | 1,543                                  | 0.029 | 43.25  | 1.23   | 1.023 | 0.99997 |
| 4372              | 3                    | 3.54                        | 35                    | 2,457                         | 440                                    | 0.080 | 70.20  | 5.58   | 1.029 | 0.99987 |
| 4373              | 4                    | 5.82                        | 788                   | 89,509                        | 776                                    | 1.015 | 113.59 | 115.35 | 3.397 | 0.99742 |
| 4385              | 1                    | 0.52                        | 1                     | 31                            | 1,122                                  | 0.001 | 31.00  | 0.03   | 1.000 | 0.99999 |
| 4431              | 7                    | 15.46                       | 80                    | 4,933                         | 1,387                                  | 0.058 | 61.66  | 3.56   | 1.000 | 0.99992 |
| 4432              | 5                    | 6.98                        | 17                    | 1,708                         | 462                                    | 0.037 | 100.47 | 3.70   | 1.000 | 0.99992 |
| 4511              | 1                    | 3.68                        | 14                    | 3,095                         | 1,131                                  | 0.012 | 221.07 | 2.74   | 1.000 | 0.99994 |
| 4601              | 4                    | 16.11                       | 322                   | 117,732                       | 414                                    | 0.778 | 365.63 | 284.38 | 1.006 | 0.99363 |
| 4602              | 9                    | 30.76                       | 81                    | 19,538                        | 947                                    | 0.086 | 241.21 | 20.63  | 1.000 | 0.99954 |
| 4692              | 3                    | 3.92                        | 88                    | 8,412                         | 470                                    | 0.187 | 95.59  | 17.90  | 1.011 | 0.99960 |
| 4714              | 2                    | 3.90                        | 8                     | 972                           | 328                                    | 0.024 | 121.50 | 2.96   | 1.000 | 0.99993 |
| 5601              | 14                   | 24.83                       | 225                   | 16,148                        | 1,163                                  | 0.193 | 71.77  | 13.88  | 1.552 | 0.99969 |
| 5602              | 7                    | 34.41                       | 740                   | 53,140                        | 681                                    | 1.087 | 71.81  | 78.03  | 1.087 | 0.99825 |
| 5603              | 13                   | 55.93                       | 291                   | 55,974                        | 1,290                                  | 0.226 | 192.35 | 43.39  | 1.021 | 0.99903 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 5641              | 1                    | 0.33                        | 1                     | 20                            | 322                                    | 0.003 | 20.00  | 0.06  | 1.000 | 0.99999 |
| 5901              | 1                    | 0.27                        | 1                     | 16                            | 678                                    | 0.001 | 16.00  | 0.02  | 1.000 | 0.99999 |
| 5902              | 1                    | 0.55                        | 1                     | 33                            | 1,012                                  | 0.001 | 33.00  | 0.03  | 1.000 | 0.99999 |
| 5904              | 2                    | 1.97                        | 34                    | 2,767                         | 1,223                                  | 0.028 | 81.38  | 2.26  | 1.000 | 0.99995 |
| 5905              | 4                    | 5.37                        | 74                    | 3,000                         | 1,876                                  | 0.039 | 40.54  | 1.60  | 1.088 | 0.99996 |
| 6021              | 2                    | 1.74                        | 15                    | 790                           | 1,275                                  | 0.012 | 52.67  | 0.62  | 1.000 | 0.99999 |
| 6022              | 2                    | 2.13                        | 5                     | 449                           | 490                                    | 0.010 | 89.80  | 0.92  | 1.250 | 0.99998 |
| 6024              | 1                    | 1.05                        | 171                   | 10,912                        | 393                                    | 0.435 | 63.81  | 27.77 | 1.000 | 0.99938 |
| 6141              | 5                    | 7.15                        | 41                    | 3,431                         | 636                                    | 0.064 | 83.68  | 5.39  | 1.025 | 0.99988 |
|                   | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL<br>CUSTOMERS<br>SERVED           | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
| Total:            | 593                  | 1,270.96                    | 37,884                | 4,586,335                     | 164,936                                | 0.230 | 121.06 | 27.81 | 1.194 | 0.99938 |

**THE EMPIRE DISTRICT ELECTRIC COMPANY**  
**CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI**  
5/1/2017 to 5/31/2017  
EXCLUDING MAJOR EVENT DAYS

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 1050              | 8                    | 13.90                       | 115                   | 9,919                         | 1,597                                  | 0.072 | 86.25  | 6.21  | 1.045 | 0.99986 |
| 1051              | 2                    | 5.65                        | 2                     | 339                           | 1,067                                  | 0.002 | 169.50 | 0.32  | 1.000 | 0.99999 |
| 1082              | 8                    | 14.13                       | 32                    | 2,164                         | 1,330                                  | 0.024 | 67.63  | 1.63  | 1.000 | 0.99996 |
| 1092              | 3                    | 5.35                        | 9                     | 883                           | 971                                    | 0.009 | 98.11  | 0.91  | 1.000 | 0.99998 |
| 1094              | 5                    | 6.70                        | 73                    | 5,344                         | 1,237                                  | 0.059 | 73.21  | 4.32  | 1.000 | 0.99990 |
| 1142              | 1                    | 5.80                        | 15                    | 5,222                         | 214                                    | 0.070 | 348.13 | 24.40 | 1.000 | 0.99944 |
| 1211              | 3                    | 3.11                        | 29                    | 1,645                         | 1,479                                  | 0.020 | 56.72  | 1.11  | 1.036 | 0.99997 |
| 1212              | 2                    | 1.82                        | 3                     | 165                           | 332                                    | 0.009 | 55.00  | 0.50  | 1.000 | 0.99999 |
| 1213              | 2                    | 1.35                        | 4                     | 157                           | 554                                    | 0.007 | 39.25  | 0.28  | 1.000 | 0.99999 |
| 1230              | 2                    | 2.87                        | 19                    | 2,336                         | 1,177                                  | 0.016 | 122.95 | 1.98  | 1.000 | 0.99995 |
| 1232              | 6                    | 10.67                       | 1,254                 | 52,337                        | 1,183                                  | 1.060 | 41.74  | 44.24 | 1.060 | 0.99898 |
| 1233              | 1                    | 0.15                        | 1                     | 9                             | 640                                    | 0.002 | 9.00   | 0.01  | 1.000 | 0.99999 |
| 1241              | 2                    | 1.34                        | 2                     | 80                            | 853                                    | 0.002 | 40.00  | 0.09  | 1.000 | 0.99999 |
| 1263              | 3                    | 2.92                        | 236                   | 15,925                        | 1,138                                  | 0.207 | 67.48  | 13.99 | 1.009 | 0.99968 |
| 1265              | 1                    | 1.67                        | 115                   | 11,503                        | 1,282                                  | 0.090 | 100.03 | 8.97  | 1.000 | 0.99979 |
| 1271              | 3                    | 3.50                        | 3                     | 210                           | 962                                    | 0.003 | 70.00  | 0.22  | 1.000 | 0.99999 |
| 1273              | 3                    | 5.34                        | 10                    | 1,500                         | 865                                    | 0.012 | 150.00 | 1.73  | 1.000 | 0.99996 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 1282              | 3                    | 3.59                        | 279                   | 20,088                        | 693                                    | 0.403 | 72.00  | 28.99  | 1.000 | 0.99933 |
| 1311              | 2                    | 6.75                        | 8                     | 1,397                         | 272                                    | 0.029 | 174.63 | 5.14   | 1.143 | 0.99988 |
| 1312              | 9                    | 19.29                       | 1,892                 | 183,071                       | 933                                    | 2.028 | 96.76  | 196.22 | 2.028 | 0.99546 |
| 1451              | 5                    | 7.71                        | 568                   | 56,963                        | 526                                    | 1.080 | 100.29 | 108.29 | 1.080 | 0.99749 |
| 1452              | 2                    | 2.41                        | 450                   | 47,141                        | 449                                    | 1.002 | 104.76 | 104.99 | 1.002 | 0.99757 |
| 1453              | 6                    | 11.75                       | 1,934                 | 191,576                       | 1,797                                  | 1.076 | 99.06  | 106.61 | 1.076 | 0.99753 |
| 1454              | 6                    | 7.97                        | 1,140                 | 109,069                       | 935                                    | 1.219 | 95.67  | 116.65 | 1.219 | 0.99730 |
| 1455              | 3                    | 7.46                        | 391                   | 41,265                        | 389                                    | 1.005 | 105.54 | 106.08 | 1.005 | 0.99754 |
| 1521              | 2                    | 3.02                        | 9                     | 846                           | 361                                    | 0.025 | 94.00  | 2.34   | 1.125 | 0.99995 |
| 1523              | 4                    | 3.31                        | 25                    | 1,087                         | 723                                    | 0.035 | 43.48  | 1.50   | 1.042 | 0.99997 |
| 1841              | 2                    | 2.80                        | 2                     | 168                           | 650                                    | 0.003 | 84.00  | 0.26   | 1.000 | 0.99999 |
| 1843              | 7                    | 23.78                       | 66                    | 15,224                        | 1,086                                  | 0.061 | 230.67 | 14.02  | 1.031 | 0.99968 |
| 2051              | 3                    | 4.75                        | 10                    | 813                           | 165                                    | 0.061 | 81.30  | 4.93   | 1.000 | 0.99989 |
| 2052              | 7                    | 12.45                       | 177                   | 16,494                        | 85                                     | 2.082 | 93.19  | 194.05 | 4.023 | 0.99551 |
| 2091              | 1                    | 0.97                        | 880                   | 51,377                        | 880                                    | 1.000 | 58.38  | 58.38  | 1.000 | 0.99865 |
| 2092              | 1                    | 1.85                        | 1                     | 111                           | 917                                    | 0.001 | 111.00 | 0.12   | 1.000 | 0.99999 |
| 2211              | 3                    | 3.30                        | 3                     | 198                           | 723                                    | 0.004 | 66.00  | 0.27   | 1.000 | 0.99999 |
| 2511              | 4                    | 8.69                        | 8                     | 1,050                         | 618                                    | 0.013 | 131.25 | 1.70   | 1.000 | 0.99996 |
| 2621              | 5                    | 8.93                        | 45                    | 4,467                         | 1,166                                  | 0.039 | 99.27  | 3.83   | 1.154 | 0.99991 |
| 2622              | 1                    | 2.43                        | 7                     | 1,023                         | 113                                    | 0.062 | 146.14 | 9.05   | 1.000 | 0.99979 |
| 2921              | 2                    | 2.35                        | 376                   | 21,166                        | 375                                    | 1.003 | 56.29  | 56.44  | 1.003 | 0.99869 |
| 2951              | 5                    | 8.01                        | 54                    | 2,966                         | 1,395                                  | 0.039 | 54.93  | 2.13   | 1.080 | 0.99995 |



| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI   | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|---------|--------|-------|---------|
| 2952              | 1                    | 1.00                        | 1                     | 60                            | 154                                    | 0.006 | 60.00   | 0.39   | 1.000 | 0.99999 |
| 2961              | 5                    | 4.70                        | 703                   | 36,966                        | 648                                    | 1.085 | 52.58   | 57.05  | 1.092 | 0.99868 |
| 2962              | 1                    | 0.60                        | 257                   | 9,260                         | 257                                    | 1.000 | 36.03   | 36.03  | 1.000 | 0.99917 |
| 3121              | 8                    | 13.61                       | 87                    | 12,589                        | 1,131                                  | 0.077 | 144.70  | 11.13  | 1.012 | 0.99974 |
| 3122              | 3                    | 4.63                        | 74                    | 7,624                         | 849                                    | 0.087 | 103.03  | 8.98   | 1.721 | 0.99979 |
| 3123              | 1                    | 3.50                        | 1                     | 210                           | 1,050                                  | 0.001 | 210.00  | 0.20   | 1.000 | 0.99999 |
| 3221              | 4                    | 4.19                        | 72                    | 4,732                         | 1,241                                  | 0.058 | 65.72   | 3.81   | 1.029 | 0.99991 |
| 3222              | 1                    | 1.28                        | 1                     | 77                            | 771                                    | 0.001 | 77.00   | 0.10   | 1.000 | 0.99999 |
| 3232              | 1                    | 2.08                        | 13                    | 1,635                         | 427                                    | 0.030 | 125.77  | 3.83   | 1.000 | 0.99991 |
| 3302              | 1                    | 2.48                        | 23                    | 3,429                         | 899                                    | 0.026 | 149.09  | 3.81   | 1.000 | 0.99991 |
| 3303              | 6                    | 6.96                        | 361                   | 24,611                        | 979                                    | 0.369 | 68.17   | 25.14  | 1.014 | 0.99942 |
| 3313              | 1                    | 3.00                        | 7                     | 1,264                         | 1,336                                  | 0.005 | 180.57  | 0.95   | 1.000 | 0.99998 |
| 3314              | 1                    | 2.28                        | 1                     | 137                           | 222                                    | 0.005 | 137.00  | 0.62   | 1.000 | 0.99999 |
| 3315              | 1                    | 0.85                        | 2                     | 103                           | 1,579                                  | 0.001 | 51.50   | 0.07   | 1.000 | 0.99999 |
| 3421              | 1                    | 4.00                        | 1                     | 240                           | 294                                    | 0.003 | 240.00  | 0.82   | 1.000 | 0.99998 |
| 3422              | 2                    | 3.10                        | 26                    | 2,682                         | 971                                    | 0.027 | 103.15  | 2.76   | 1.040 | 0.99994 |
| 3471              | 1                    | 0.92                        | 1                     | 55                            | 170                                    | 0.006 | 55.00   | 0.32   | 1.000 | 0.99999 |
| 3472              | 2                    | 0.90                        | 20                    | 688                           | 1,580                                  | 0.013 | 34.40   | 0.44   | 1.053 | 0.99999 |
| 3551              | 1                    | 1.47                        | 245                   | 21,560                        | 1,031                                  | 0.238 | 88.00   | 20.91  | 1.000 | 0.99952 |
| 3552              | 3                    | 129.08                      | 50                    | 183,819                       | 575                                    | 0.087 | 3676.38 | 319.69 | 1.923 | 0.99260 |
| 3553              | 2                    | 2.34                        | 2                     | 140                           | 1,045                                  | 0.002 | 70.00   | 0.13   | 1.000 | 0.99999 |
| 3591              | 4                    | 6.26                        | 1,208                 | 83,190                        | 1,202                                  | 1.005 | 68.87   | 69.21  | 1.005 | 0.99840 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 3592              | 6                    | 7.01                        | 1,807                 | 124,691                       | 1,747                                  | 1.034 | 69.00  | 71.37  | 1.034 | 0.99835 |
| 3593              | 5                    | 8.13                        | 951                   | 68,027                        | 929                                    | 1.024 | 71.53  | 73.23  | 1.024 | 0.99830 |
| 3594              | 1                    | 0.62                        | 7                     | 259                           | 680                                    | 0.010 | 37.00  | 0.38   | 1.000 | 0.99999 |
| 3621              | 4                    | 8.77                        | 25                    | 1,501                         | 1,552                                  | 0.016 | 60.04  | 0.97   | 1.136 | 0.99998 |
| 3661              | 1                    | 1.22                        | 1                     | 73                            | 1,022                                  | 0.001 | 73.00  | 0.07   | 1.000 | 0.99999 |
| 3662              | 4                    | 3.33                        | 8                     | 553                           | 779                                    | 0.010 | 69.13  | 0.71   | 1.000 | 0.99998 |
| 3663              | 2                    | 2.14                        | 13                    | 1,196                         | 734                                    | 0.018 | 92.00  | 1.63   | 1.083 | 0.99996 |
| 3664              | 4                    | 2.43                        | 43                    | 1,383                         | 549                                    | 0.078 | 32.16  | 2.52   | 1.075 | 0.99994 |
| 3671              | 2                    | 2.35                        | 56                    | 4,917                         | 503                                    | 0.111 | 87.80  | 9.78   | 1.018 | 0.99977 |
| 3672              | 2                    | 1.31                        | 63                    | 2,630                         | 137                                    | 0.460 | 41.75  | 19.20  | 1.000 | 0.99956 |
| 3691              | 5                    | 10.97                       | 56                    | 5,530                         | 1,163                                  | 0.048 | 98.75  | 4.75   | 1.000 | 0.99989 |
| 3692              | 1                    | 1.85                        | 1                     | 111                           | 410                                    | 0.002 | 111.00 | 0.27   | 1.000 | 0.99999 |
| 3694              | 3                    | 4.71                        | 3                     | 283                           | 1,328                                  | 0.002 | 94.33  | 0.21   | 1.000 | 0.99999 |
| 3702              | 1                    | 0.58                        | 1                     | 35                            | 611                                    | 0.002 | 35.00  | 0.06   | 1.000 | 0.99999 |
| 3751              | 7                    | 8.08                        | 1,507                 | 91,445                        | 882                                    | 1.709 | 60.68  | 103.68 | 1.024 | 0.99760 |
| 3871              | 2                    | 3.32                        | 30                    | 4,854                         | 1,387                                  | 0.022 | 161.80 | 3.50   | 1.000 | 0.99992 |
| 3872              | 3                    | 2.57                        | 26                    | 1,314                         | 1,067                                  | 0.024 | 50.54  | 1.23   | 1.000 | 0.99997 |
| 3873              | 2                    | 2.68                        | 797                   | 84,352                        | 796                                    | 1.001 | 105.84 | 105.97 | 1.001 | 0.99755 |
| 3878              | 4                    | 4.54                        | 38                    | 1,627                         | 792                                    | 0.048 | 42.82  | 2.05   | 1.000 | 0.99995 |
| 3891              | 4                    | 6.83                        | 16                    | 1,159                         | 455                                    | 0.035 | 72.44  | 2.55   | 1.000 | 0.99994 |
| 3893              | 7                    | 19.61                       | 112                   | 17,722                        | 1,111                                  | 0.101 | 158.23 | 15.95  | 1.037 | 0.99963 |
| 3901              | 6                    | 9.31                        | 139                   | 13,324                        | 874                                    | 0.159 | 95.86  | 15.24  | 1.061 | 0.99965 |

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|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 3903              | 1                    | 0.53                        | 1                     | 32                            | 298                                    | 0.003 | 32.00  | 0.11  | 1.000 | 0.99999 |
| 3912              | 2                    | 4.21                        | 920                   | 48,907                        | 1,160                                  | 0.793 | 53.16  | 42.16 | 1.001 | 0.99902 |
| 3913              | 1                    | 0.53                        | 1                     | 32                            | 810                                    | 0.001 | 32.00  | 0.04  | 1.000 | 0.99999 |
| 3951              | 8                    | 16.52                       | 133                   | 16,005                        | 929                                    | 0.143 | 120.34 | 17.23 | 1.039 | 0.99960 |
| 3952              | 9                    | 14.44                       | 105                   | 11,383                        | 1,273                                  | 0.082 | 108.41 | 8.94  | 1.019 | 0.99979 |
| 3953              | 2                    | 2.56                        | 58                    | 4,003                         | 521                                    | 0.111 | 69.02  | 7.68  | 1.018 | 0.99982 |
| 3971              | 2                    | 3.79                        | 125                   | 13,183                        | 665                                    | 0.188 | 105.46 | 19.82 | 1.689 | 0.99954 |
| 3981              | 16                   | 33.66                       | 235                   | 15,730                        | 1,503                                  | 0.156 | 66.94  | 10.47 | 2.304 | 0.99976 |
| 3982              | 12                   | 21.39                       | 2,111                 | 119,536                       | 1,769                                  | 1.193 | 56.63  | 67.57 | 1.193 | 0.99844 |
| 3991              | 5                    | 9.89                        | 21                    | 1,949                         | 726                                    | 0.029 | 92.81  | 2.68  | 1.105 | 0.99994 |
| 4031              | 2                    | 3.10                        | 3                     | 275                           | 704                                    | 0.004 | 91.67  | 0.39  | 1.000 | 0.99999 |
| 4091              | 2                    | 2.72                        | 45                    | 3,841                         | 1,148                                  | 0.039 | 85.36  | 3.35  | 1.000 | 0.99992 |
| 4092              | 1                    | 1.45                        | 1                     | 87                            | 434                                    | 0.002 | 87.00  | 0.20  | 1.000 | 0.99999 |
| 4101              | 8                    | 16.72                       | 143                   | 35,320                        | 589                                    | 0.243 | 246.99 | 59.97 | 1.036 | 0.99861 |
| 4132              | 1                    | 5.05                        | 11                    | 3,341                         | 565                                    | 0.019 | 303.73 | 5.91  | 1.000 | 0.99986 |
| 4133              | 1                    | 0.77                        | 1                     | 46                            | 640                                    | 0.002 | 46.00  | 0.07  | 1.000 | 0.99999 |
| 4134              | 5                    | 5.42                        | 5                     | 326                           | 835                                    | 0.006 | 65.20  | 0.39  | 1.000 | 0.99999 |
| 4136              | 2                    | 3.44                        | 32                    | 4,022                         | 669                                    | 0.048 | 125.69 | 6.01  | 1.032 | 0.99986 |
| 4138              | 1                    | 1.57                        | 1                     | 94                            | 745                                    | 0.001 | 94.00  | 0.13  | 1.000 | 0.99999 |
| 4141              | 1                    | 1.02                        | 1                     | 61                            | 82                                     | 0.012 | 61.00  | 0.74  | 1.000 | 0.99998 |
| 4142              | 4                    | 3.48                        | 89                    | 6,338                         | 597                                    | 0.149 | 71.21  | 10.62 | 1.023 | 0.99975 |
| 4151              | 3                    | 1.90                        | 73                    | 2,572                         | 1,246                                  | 0.059 | 35.23  | 2.06  | 1.000 | 0.99995 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 4152              | 3                    | 6.10                        | 19                    | 1,534                         | 820                                    | 0.023 | 80.74  | 1.87   | 1.000 | 0.99996 |
| 4153              | 5                    | 5.05                        | 75                    | 4,571                         | 1,285                                  | 0.058 | 60.95  | 3.56   | 1.000 | 0.99992 |
| 4154              | 1                    | 0.78                        | 1                     | 47                            | 1,209                                  | 0.001 | 47.00  | 0.04   | 1.000 | 0.99999 |
| 4155              | 3                    | 4.64                        | 51                    | 4,473                         | 2,133                                  | 0.024 | 87.71  | 2.10   | 1.085 | 0.99995 |
| 4172              | 5                    | 2.42                        | 1,745                 | 12,946                        | 1,726                                  | 1.011 | 7.42   | 7.50   | 1.012 | 0.99983 |
| 4173              | 5                    | 7.59                        | 130                   | 13,118                        | 634                                    | 0.205 | 100.91 | 20.69  | 1.057 | 0.99952 |
| 4182              | 4                    | 3.28                        | 56                    | 2,582                         | 891                                    | 0.063 | 46.11  | 2.90   | 1.333 | 0.99993 |
| 4212              | 2                    | 5.97                        | 9                     | 764                           | 819                                    | 0.011 | 84.89  | 0.93   | 1.000 | 0.99998 |
| 4222              | 1                    | 0.28                        | 1                     | 17                            | 1,045                                  | 0.001 | 17.00  | 0.02   | 1.000 | 0.99999 |
| 4223              | 1                    | 1.02                        | 3                     | 183                           | 828                                    | 0.004 | 61.00  | 0.22   | 1.000 | 0.99999 |
| 4302              | 1                    | 1.20                        | 101                   | 7,302                         | 651                                    | 0.155 | 72.30  | 11.22  | 1.000 | 0.99974 |
| 4303              | 3                    | 12.87                       | 586                   | 168,753                       | 982                                    | 0.597 | 287.97 | 171.85 | 1.003 | 0.99602 |
| 4311              | 1                    | 1.42                        | 15                    | 1,288                         | 838                                    | 0.018 | 85.87  | 1.54   | 1.000 | 0.99996 |
| 4312              | 2                    | 0.80                        | 25                    | 640                           | 844                                    | 0.030 | 25.60  | 0.76   | 1.000 | 0.99998 |
| 4313              | 1                    | 0.50                        | 12                    | 364                           | 535                                    | 0.022 | 30.33  | 0.68   | 1.000 | 0.99998 |
| 4324              | 1                    | 0.83                        | 68                    | 3,366                         | 1,255                                  | 0.054 | 49.50  | 2.68   | 1.000 | 0.99994 |
| 4341              | 7                    | 10.54                       | 43                    | 3,835                         | 1,781                                  | 0.024 | 89.19  | 2.15   | 1.103 | 0.99995 |
| 4342              | 5                    | 6.05                        | 99                    | 5,154                         | 1,752                                  | 0.057 | 52.06  | 2.94   | 1.151 | 0.99993 |
| 4343              | 4                    | 6.43                        | 65                    | 7,001                         | 1,025                                  | 0.063 | 107.71 | 6.83   | 1.000 | 0.99984 |
| 4361              | 2                    | 3.67                        | 2                     | 220                           | 797                                    | 0.003 | 110.00 | 0.28   | 1.000 | 0.99999 |
| 4362              | 1                    | 1.07                        | 36                    | 2,332                         | 828                                    | 0.043 | 64.78  | 2.82   | 1.000 | 0.99993 |
| 4363              | 8                    | 11.90                       | 130                   | 9,827                         | 1,691                                  | 0.077 | 75.59  | 5.81   | 1.383 | 0.99987 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 4371              | 6                    | 6.82                        | 43                    | 1,500                         | 1,543                                  | 0.028 | 34.88  | 0.97   | 1.024 | 0.99998 |
| 4372              | 2                    | 2.57                        | 16                    | 1,344                         | 440                                    | 0.036 | 84.00  | 3.05   | 1.067 | 0.99993 |
| 4373              | 4                    | 5.82                        | 788                   | 89,509                        | 776                                    | 1.015 | 113.59 | 115.35 | 3.397 | 0.99733 |
| 4385              | 1                    | 0.52                        | 1                     | 31                            | 1,122                                  | 0.001 | 31.00  | 0.03   | 1.000 | 0.99999 |
| 4431              | 6                    | 14.09                       | 60                    | 3,340                         | 1,387                                  | 0.043 | 55.67  | 2.41   | 1.034 | 0.99994 |
| 4432              | 4                    | 5.20                        | 4                     | 312                           | 462                                    | 0.009 | 78.00  | 0.68   | 1.000 | 0.99998 |
| 4511              | 1                    | 3.68                        | 14                    | 3,095                         | 1,131                                  | 0.012 | 221.07 | 2.74   | 1.000 | 0.99994 |
| 4601              | 3                    | 7.91                        | 261                   | 87,679                        | 414                                    | 0.630 | 335.93 | 211.79 | 1.008 | 0.99510 |
| 4602              | 8                    | 15.58                       | 64                    | 4,046                         | 947                                    | 0.068 | 63.22  | 4.27   | 1.000 | 0.99990 |
| 4692              | 3                    | 3.92                        | 88                    | 8,412                         | 470                                    | 0.187 | 95.59  | 17.90  | 1.011 | 0.99959 |
| 4714              | 1                    | 1.85                        | 1                     | 111                           | 328                                    | 0.003 | 111.00 | 0.34   | 1.000 | 0.99999 |
| 5601              | 10                   | 20.61                       | 104                   | 7,794                         | 1,163                                  | 0.089 | 74.94  | 6.70   | 1.000 | 0.99984 |
| 5602              | 7                    | 34.41                       | 740                   | 53,140                        | 681                                    | 1.087 | 71.81  | 78.03  | 1.087 | 0.99819 |
| 5603              | 13                   | 55.93                       | 291                   | 55,974                        | 1,290                                  | 0.226 | 192.35 | 43.39  | 1.021 | 0.99900 |
| 5641              | 1                    | 0.33                        | 1                     | 20                            | 322                                    | 0.003 | 20.00  | 0.06   | 1.000 | 0.99999 |
| 5901              | 1                    | 0.27                        | 1                     | 16                            | 678                                    | 0.001 | 16.00  | 0.02   | 1.000 | 0.99999 |
| 5902              | 1                    | 0.55                        | 1                     | 33                            | 1,012                                  | 0.001 | 33.00  | 0.03   | 1.000 | 0.99999 |
| 5904              | 2                    | 1.97                        | 34                    | 2,767                         | 1,223                                  | 0.028 | 81.38  | 2.26   | 1.000 | 0.99995 |
| 5905              | 4                    | 5.37                        | 74                    | 3,000                         | 1,876                                  | 0.039 | 40.54  | 1.60   | 1.088 | 0.99996 |
| 6021              | 2                    | 1.74                        | 15                    | 790                           | 1,275                                  | 0.012 | 52.67  | 0.62   | 1.000 | 0.99999 |
| 6022              | 2                    | 2.13                        | 5                     | 449                           | 490                                    | 0.010 | 89.80  | 0.92   | 1.250 | 0.99998 |
| 6024              | 1                    | 1.05                        | 171                   | 10,912                        | 393                                    | 0.435 | 63.81  | 27.77  | 1.000 | 0.99936 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|-------|-------|-------|---------|
| 6141              | 5                    | 7.15                        | 41                    | 3,431                         | 636                                    | 0.064 | 83.68 | 5.39  | 1.025 | 0.99988 |
|                   | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL<br>CUSTOMERS<br>SERVED           | SAIFI | CAIDI | SAIDI | CAIFI | ASAI    |
| Total:            | 508                  | 999.47                      | 29,308                | 2,574,460                     | 164,936                                | 0.178 | 87.84 | 15.61 | 1.116 | 0.99964 |

**THE EMPIRE DISTRICT ELECTRIC COMPANY**  
**CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI**  
6/1/2017 to 6/30/2017  
INCLUDING MAJOR EVENT DAYS

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 1050              | 2                    | 4.22                        | 50                    | 2,507                         | 1,597                                  | 0.031 | 50.14  | 1.57  | 1.000 | 0.99996 |
| 1051              | 4                    | 7.54                        | 4                     | 452                           | 1,067                                  | 0.004 | 113.00 | 0.42  | 1.000 | 0.99999 |
| 1052              | 2                    | 2.33                        | 2                     | 140                           | 1,159                                  | 0.002 | 70.00  | 0.12  | 1.000 | 0.99999 |
| 1082              | 7                    | 7.14                        | 7                     | 428                           | 1,330                                  | 0.005 | 61.14  | 0.32  | 1.000 | 0.99999 |
| 1084              | 2                    | 1.95                        | 2                     | 117                           | 5                                      | 0.400 | 58.50  | 23.40 | 2.000 | 0.99946 |
| 1091              | 2                    | 2.33                        | 60                    | 6,200                         | 692                                    | 0.087 | 103.33 | 8.96  | 1.017 | 0.99979 |
| 1092              | 5                    | 6.30                        | 261                   | 17,730                        | 971                                    | 0.269 | 67.93  | 18.26 | 1.088 | 0.99958 |
| 1093              | 1                    | 2.82                        | 1                     | 169                           | 239                                    | 0.004 | 169.00 | 0.71  | 1.000 | 0.99998 |
| 1094              | 4                    | 4.52                        | 41                    | 1,676                         | 1,237                                  | 0.033 | 40.88  | 1.35  | 1.000 | 0.99997 |
| 1103              | 3                    | 2.55                        | 3                     | 153                           | 979                                    | 0.003 | 51.00  | 0.16  | 1.000 | 0.99999 |
| 1141              | 2                    | 1.18                        | 2                     | 71                            | 902                                    | 0.002 | 35.50  | 0.08  | 1.000 | 0.99999 |
| 1211              | 5                    | 6.39                        | 27                    | 1,492                         | 1,479                                  | 0.018 | 55.26  | 1.01  | 1.174 | 0.99998 |
| 1213              | 5                    | 7.90                        | 33                    | 2,959                         | 554                                    | 0.060 | 89.67  | 5.34  | 1.100 | 0.99988 |
| 1232              | 2                    | 2.84                        | 174                   | 19,449                        | 1,183                                  | 0.147 | 111.78 | 16.44 | 1.000 | 0.99962 |
| 1241              | 1                    | 1.85                        | 1                     | 111                           | 853                                    | 0.001 | 111.00 | 0.13  | 1.000 | 0.99999 |
| 1243              | 1                    | 1.15                        | 1                     | 69                            | 1,199                                  | 0.001 | 69.00  | 0.06  | 1.000 | 0.99999 |
| 1261              | 1                    | 3.60                        | 1                     | 216                           | 397                                    | 0.003 | 216.00 | 0.54  | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 1263              | 1                    | 0.60                        | 34                    | 1,251                         | 1,138                                  | 0.030 | 36.79  | 1.10  | 1.000 | 0.99997 |
| 1271              | 4                    | 4.35                        | 16                    | 849                           | 962                                    | 0.017 | 53.06  | 0.88  | 1.143 | 0.99998 |
| 1273              | 2                    | 2.04                        | 2                     | 122                           | 865                                    | 0.002 | 61.00  | 0.14  | 1.000 | 0.99999 |
| 1282              | 4                    | 2.95                        | 272                   | 10,718                        | 693                                    | 0.392 | 39.40  | 15.47 | 1.004 | 0.99964 |
| 1284              | 1                    | 0.90                        | 1                     | 54                            | 948                                    | 0.001 | 54.00  | 0.06  | 1.000 | 0.99999 |
| 1285              | 2                    | 6.63                        | 231                   | 56,498                        | 1,094                                  | 0.211 | 244.58 | 51.64 | 1.000 | 0.99880 |
| 1451              | 1                    | 1.73                        | 4                     | 419                           | 526                                    | 0.008 | 104.75 | 0.80  | 1.000 | 0.99998 |
| 1452              | 1                    | 1.12                        | 1                     | 67                            | 449                                    | 0.002 | 67.00  | 0.15  | 1.000 | 0.99999 |
| 1453              | 2                    | 2.23                        | 27                    | 2,183                         | 1,797                                  | 0.015 | 80.85  | 1.21  | 1.000 | 0.99997 |
| 1455              | 1                    | 3.00                        | 1                     | 180                           | 389                                    | 0.003 | 180.00 | 0.46  | 1.000 | 0.99999 |
| 1523              | 4                    | 6.56                        | 728                   | 65,171                        | 723                                    | 1.007 | 89.52  | 90.14 | 1.806 | 0.99791 |
| 1842              | 1                    | 1.60                        | 1                     | 96                            | 281                                    | 0.004 | 96.00  | 0.34  | 1.000 | 0.99999 |
| 1843              | 4                    | 4.34                        | 15                    | 881                           | 1,086                                  | 0.014 | 58.73  | 0.81  | 1.000 | 0.99998 |
| 2052              | 2                    | 1.78                        | 2                     | 107                           | 85                                     | 0.024 | 53.50  | 1.26  | 1.000 | 0.99997 |
| 2092              | 1                    | 1.23                        | 1                     | 74                            | 917                                    | 0.001 | 74.00  | 0.08  | 1.000 | 0.99999 |
| 2171              | 1                    | 0.67                        | 1                     | 40                            | 564                                    | 0.002 | 40.00  | 0.07  | 1.000 | 0.99999 |
| 2211              | 3                    | 3.16                        | 56                    | 3,216                         | 723                                    | 0.077 | 57.43  | 4.45  | 1.018 | 0.99990 |
| 2212              | 5                    | 7.48                        | 58                    | 4,785                         | 1,294                                  | 0.045 | 82.50  | 3.70  | 1.018 | 0.99991 |
| 2621              | 3                    | 5.94                        | 269                   | 24,891                        | 1,166                                  | 0.231 | 92.53  | 21.35 | 1.007 | 0.99951 |
| 2952              | 1                    | 0.72                        | 26                    | 1,108                         | 154                                    | 0.169 | 42.62  | 7.19  | 1.000 | 0.99983 |
| 2961              | 1                    | 6.82                        | 103                   | 42,157                        | 648                                    | 0.159 | 409.29 | 65.06 | 1.000 | 0.99849 |
| 3082              | 1                    | 1.88                        | 1                     | 113                           | 322                                    | 0.003 | 113.00 | 0.35  | 1.000 | 0.99999 |



## CONFIDENTIAL 4 CSR 240-2.135(2)(A)4

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 3122              | 3                    | 5.37                        | 6                     | 706                           | 849                                    | 0.007 | 117.67 | 0.83  | 1.000 | 0.99998 |
| 3123              | 2                    | 4.70                        | 2                     | 282                           | 1,050                                  | 0.002 | 141.00 | 0.27  | 1.000 | 0.99999 |
| 3181              | 1                    | 1.37                        | 1                     | 82                            | 724                                    | 0.001 | 82.00  | 0.11  | 1.000 | 0.99999 |
| 3221              | 7                    | 11.49                       | 149                   | 13,999                        | 1,241                                  | 0.120 | 93.95  | 11.28 | 6.478 | 0.99974 |
| 3222              | 2                    | 3.71                        | 11                    | 1,408                         | 771                                    | 0.014 | 128.00 | 1.83  | 1.000 | 0.99996 |
| 3231              | 1                    | 1.97                        | 1                     | 118                           | 202                                    | 0.005 | 118.00 | 0.58  | 1.000 | 0.99999 |
| 3232              | 2                    | 2.45                        | 10                    | 609                           | 427                                    | 0.023 | 60.90  | 1.43  | 1.111 | 0.99997 |
| 3301              | 1                    | 1.13                        | 13                    | 892                           | 196                                    | 0.066 | 68.62  | 4.55  | 1.000 | 0.99989 |
| 3302              | 1                    | 1.07                        | 3                     | 194                           | 899                                    | 0.003 | 64.67  | 0.22  | 1.000 | 0.99999 |
| 3303              | 3                    | 3.11                        | 45                    | 2,529                         | 979                                    | 0.046 | 56.20  | 2.58  | 1.023 | 0.99994 |
| 3311              | 1                    | 0.73                        | 533                   | 23,700                        | 534                                    | 0.998 | 44.47  | 44.38 | 1.000 | 0.99897 |
| 3312              | 1                    | 1.02                        | 399                   | 24,718                        | 399                                    | 1.000 | 61.95  | 61.95 | 1.000 | 0.99857 |
| 3313              | 3                    | 2.78                        | 1,353                 | 84,787                        | 1,336                                  | 1.013 | 62.67  | 63.46 | 1.013 | 0.99853 |
| 3314              | 2                    | 1.37                        | 220                   | 9,620                         | 222                                    | 0.991 | 43.73  | 43.33 | 1.005 | 0.99900 |
| 3315              | 3                    | 6.14                        | 1,590                 | 71,937                        | 1,579                                  | 1.007 | 45.24  | 45.56 | 1.007 | 0.99895 |
| 3421              | 1                    | 1.38                        | 1                     | 83                            | 294                                    | 0.003 | 83.00  | 0.28  | 1.000 | 0.99999 |
| 3422              | 4                    | 9.25                        | 35                    | 3,773                         | 971                                    | 0.036 | 107.80 | 3.89  | 1.029 | 0.99991 |
| 3423              | 2                    | 4.20                        | 25                    | 2,690                         | 386                                    | 0.065 | 107.60 | 6.97  | 1.042 | 0.99984 |
| 3472              | 3                    | 2.02                        | 7                     | 221                           | 1,580                                  | 0.004 | 31.57  | 0.14  | 1.000 | 0.99999 |
| 3551              | 3                    | 2.70                        | 86                    | 5,552                         | 1,031                                  | 0.083 | 64.56  | 5.39  | 1.012 | 0.99988 |
| 3552              | 1                    | 0.53                        | 1                     | 32                            | 575                                    | 0.002 | 32.00  | 0.06  | 1.000 | 0.99999 |
| 3553              | 3                    | 3.60                        | 18                    | 1,804                         | 1,045                                  | 0.017 | 100.22 | 1.73  | 1.000 | 0.99996 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 3591              | 1                    | 1.62                        | 1                     | 97                            | 1,202                                  | 0.001 | 97.00  | 0.08   | 1.000 | 0.99999 |
| 3592              | 4                    | 5.04                        | 29                    | 2,794                         | 1,747                                  | 0.017 | 96.34  | 1.60   | 1.074 | 0.99996 |
| 3594              | 10                   | 9.93                        | 47                    | 3,506                         | 680                                    | 0.069 | 74.60  | 5.16   | 1.000 | 0.99988 |
| 3621              | 7                    | 6.64                        | 29                    | 2,160                         | 1,552                                  | 0.019 | 74.48  | 1.39   | 1.706 | 0.99997 |
| 3661              | 3                    | 2.48                        | 89                    | 5,138                         | 1,022                                  | 0.087 | 57.73  | 5.03   | 1.000 | 0.99988 |
| 3662              | 4                    | 5.88                        | 1,429                 | 118,517                       | 779                                    | 1.834 | 82.94  | 152.14 | 1.834 | 0.99648 |
| 3663              | 1                    | 1.07                        | 11                    | 712                           | 734                                    | 0.015 | 64.73  | 0.97   | 1.000 | 0.99998 |
| 3664              | 2                    | 1.29                        | 31                    | 1,252                         | 549                                    | 0.056 | 40.39  | 2.28   | 1.033 | 0.99995 |
| 3691              | 3                    | 4.55                        | 1,165                 | 57,986                        | 1,163                                  | 1.002 | 49.77  | 49.86  | 1.002 | 0.99885 |
| 3692              | 1                    | 1.28                        | 7                     | 544                           | 410                                    | 0.017 | 77.71  | 1.33   | 1.000 | 0.99997 |
| 3693              | 1                    | 1.10                        | 21                    | 1,398                         | 186                                    | 0.113 | 66.57  | 7.52   | 1.000 | 0.99983 |
| 3694              | 2                    | 1.43                        | 12                    | 501                           | 1,328                                  | 0.009 | 41.75  | 0.38   | 1.000 | 0.99999 |
| 3701              | 1                    | 0.42                        | 1                     | 25                            | 485                                    | 0.002 | 25.00  | 0.05   | 1.000 | 0.99999 |
| 3702              | 1                    | 0.57                        | 8                     | 273                           | 611                                    | 0.013 | 34.13  | 0.45   | 1.000 | 0.99999 |
| 3751              | 3                    | 2.75                        | 3                     | 165                           | 882                                    | 0.003 | 55.00  | 0.19   | 1.000 | 0.99999 |
| 3871              | 2                    | 3.28                        | 2                     | 197                           | 1,387                                  | 0.001 | 98.50  | 0.14   | 1.000 | 0.99999 |
| 3872              | 3                    | 2.90                        | 38                    | 3,169                         | 1,067                                  | 0.036 | 83.39  | 2.97   | 1.000 | 0.99993 |
| 3873              | 1                    | 3.02                        | 87                    | 15,691                        | 796                                    | 0.109 | 180.36 | 19.71  | 1.000 | 0.99954 |
| 3878              | 3                    | 2.44                        | 14                    | 860                           | 792                                    | 0.018 | 61.43  | 1.09   | 1.000 | 0.99997 |
| 3891              | 2                    | 4.65                        | 10                    | 1,400                         | 455                                    | 0.022 | 140.00 | 3.08   | 1.111 | 0.99993 |
| 3893              | 7                    | 13.26                       | 17                    | 2,020                         | 1,111                                  | 0.015 | 118.82 | 1.82   | 1.000 | 0.99996 |
| 3894              | 1                    | 0.88                        | 1                     | 53                            | 116                                    | 0.009 | 53.00  | 0.46   | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 3901              | 2                    | 1.34                        | 24                    | 1,035                         | 874                                    | 0.027 | 43.13  | 1.18   | 1.000 | 0.99997 |
| 3912              | 1                    | 1.47                        | 1,121                 | 99,488                        | 1,160                                  | 0.966 | 88.75  | 85.77  | 1.000 | 0.99801 |
| 3913              | 1                    | 0.73                        | 1                     | 44                            | 810                                    | 0.001 | 44.00  | 0.05   | 1.000 | 0.99999 |
| 3914              | 2                    | 5.55                        | 47                    | 4,891                         | 373                                    | 0.126 | 104.06 | 13.11  | 1.000 | 0.99970 |
| 3951              | 3                    | 6.20                        | 27                    | 4,180                         | 929                                    | 0.029 | 154.81 | 4.50   | 1.038 | 0.99990 |
| 3952              | 10                   | 16.91                       | 110                   | 13,594                        | 1,273                                  | 0.086 | 123.58 | 10.68  | 1.000 | 0.99975 |
| 3953              | 2                    | 2.25                        | 2                     | 135                           | 521                                    | 0.004 | 67.50  | 0.26   | 1.000 | 0.99999 |
| 3981              | 9                    | 20.14                       | 930                   | 248,003                       | 1,503                                  | 0.619 | 266.67 | 165.01 | 1.080 | 0.99618 |
| 3982              | 4                    | 9.16                        | 237                   | 25,352                        | 1,769                                  | 0.134 | 106.97 | 14.33  | 1.000 | 0.99967 |
| 3991              | 5                    | 10.51                       | 83                    | 4,944                         | 726                                    | 0.114 | 59.57  | 6.81   | 1.051 | 0.99984 |
| 3992              | 1                    | 1.35                        | 1                     | 81                            | 166                                    | 0.006 | 81.00  | 0.49   | 1.000 | 0.99999 |
| 402               | 1                    | 0.75                        | 1                     | 45                            | 107                                    | 0.009 | 45.00  | 0.42   | 1.000 | 0.99999 |
| 4031              | 4                    | 5.19                        | 65                    | 4,802                         | 704                                    | 0.092 | 73.88  | 6.82   | 1.048 | 0.99984 |
| 4091              | 4                    | 7.10                        | 1,228                 | 123,543                       | 1,148                                  | 1.070 | 100.61 | 107.62 | 2.981 | 0.99751 |
| 4092              | 2                    | 2.87                        | 12                    | 958                           | 434                                    | 0.028 | 79.83  | 2.21   | 1.091 | 0.99995 |
| 4102              | 4                    | 5.05                        | 906                   | 76,131                        | 903                                    | 1.003 | 84.03  | 84.31  | 1.003 | 0.99805 |
| 4133              | 1                    | 0.88                        | 29                    | 1,557                         | 640                                    | 0.045 | 53.69  | 2.43   | 1.000 | 0.99994 |
| 4134              | 1                    | 1.05                        | 73                    | 4,637                         | 835                                    | 0.087 | 63.52  | 5.55   | 1.000 | 0.99987 |
| 4137              | 5                    | 3.93                        | 5                     | 236                           | 794                                    | 0.006 | 47.20  | 0.30   | 1.000 | 0.99999 |
| 4138              | 5                    | 3.15                        | 20                    | 854                           | 745                                    | 0.027 | 42.70  | 1.15   | 1.000 | 0.99997 |
| 4151              | 3                    | 5.08                        | 38                    | 1,884                         | 1,246                                  | 0.030 | 49.58  | 1.51   | 1.000 | 0.99996 |
| 4152              | 2                    | 2.17                        | 3                     | 177                           | 820                                    | 0.004 | 59.00  | 0.22   | 1.500 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 4153              | 5                    | 9.03                        | 19                    | 1,402                         | 1,285                                  | 0.015 | 73.79  | 1.09   | 1.000 | 0.99997 |
| 4172              | 1                    | 1.45                        | 4                     | 349                           | 1,726                                  | 0.002 | 87.25  | 0.20   | 1.000 | 0.99999 |
| 4173              | 2                    | 2.73                        | 46                    | 3,877                         | 634                                    | 0.073 | 84.28  | 6.12   | 1.000 | 0.99986 |
| 4181              | 1                    | 0.92                        | 20                    | 1,115                         | 625                                    | 0.032 | 55.75  | 1.78   | 1.000 | 0.99996 |
| 4212              | 1                    | 1.27                        | 30                    | 2,285                         | 819                                    | 0.037 | 76.17  | 2.79   | 1.000 | 0.99994 |
| 4223              | 1                    | 0.60                        | 1                     | 36                            | 828                                    | 0.001 | 36.00  | 0.04   | 1.000 | 0.99999 |
| 4303              | 2                    | 1.67                        | 33                    | 1,141                         | 982                                    | 0.034 | 34.58  | 1.16   | 1.031 | 0.99997 |
| 4313              | 1                    | 1.62                        | 1                     | 97                            | 535                                    | 0.002 | 97.00  | 0.18   | 1.000 | 0.99999 |
| 4324              | 1                    | 1.10                        | 17                    | 1,136                         | 1,255                                  | 0.014 | 66.82  | 0.91   | 1.000 | 0.99998 |
| 4332              | 1                    | 1.48                        | 1                     | 89                            | 319                                    | 0.003 | 89.00  | 0.28   | 1.000 | 0.99999 |
| 4333              | 1                    | 0.47                        | 683                   | 19,124                        | 683                                    | 1.000 | 28.00  | 28.00  | 1.000 | 0.99935 |
| 4341              | 10                   | 12.68                       | 162                   | 10,257                        | 1,781                                  | 0.091 | 63.31  | 5.76   | 1.237 | 0.99987 |
| 4342              | 5                    | 7.03                        | 127                   | 10,555                        | 1,752                                  | 0.072 | 83.11  | 6.02   | 1.067 | 0.99986 |
| 4343              | 2                    | 1.42                        | 5                     | 295                           | 1,025                                  | 0.005 | 59.00  | 0.29   | 1.250 | 0.99999 |
| 4363              | 2                    | 2.45                        | 2                     | 147                           | 1,691                                  | 0.001 | 73.50  | 0.09   | 1.000 | 0.99999 |
| 4371              | 3                    | 3.65                        | 40                    | 2,697                         | 1,543                                  | 0.026 | 67.43  | 1.75   | 1.026 | 0.99996 |
| 4372              | 1                    | 0.63                        | 1                     | 38                            | 440                                    | 0.002 | 38.00  | 0.09   | 1.000 | 0.99999 |
| 4373              | 5                    | 15.04                       | 1,025                 | 118,504                       | 776                                    | 1.321 | 115.61 | 152.71 | 1.319 | 0.99647 |
| 4381              | 1                    | 0.68                        | 1                     | 41                            | 332                                    | 0.003 | 41.00  | 0.12   | 1.000 | 0.99999 |
| 4385              | 2                    | 0.97                        | 2                     | 58                            | 1,122                                  | 0.002 | 29.00  | 0.05   | 1.000 | 0.99999 |
| 4431              | 3                    | 4.49                        | 3                     | 270                           | 1,387                                  | 0.002 | 90.00  | 0.19   | 1.000 | 0.99999 |
| 4432              | 2                    | 3.62                        | 12                    | 1,191                         | 462                                    | 0.026 | 99.25  | 2.58   | 1.000 | 0.99994 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI   | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|---------|--------|-------|---------|
| 4511              | 1                    | 0.43                        | 9                     | 242                           | 1,131                                  | 0.008 | 26.89   | 0.21   | 1.000 | 0.99999 |
| 455               | 2                    | 2.77                        | 2                     | 166                           | 168                                    | 0.012 | 83.00   | 0.99   | 1.000 | 0.99998 |
| 4602              | 5                    | 5.61                        | 221                   | 24,008                        | 947                                    | 0.233 | 108.63  | 25.35  | 1.052 | 0.99941 |
| 4692              | 1                    | 30.47                       | 1                     | 1,828                         | 470                                    | 0.002 | 1828.00 | 3.89   | 1.000 | 0.99991 |
| 4714              | 1                    | 1.85                        | 1                     | 111                           | 328                                    | 0.003 | 111.00  | 0.34   | 1.000 | 0.99999 |
| 5601              | 5                    | 3.15                        | 75                    | 3,695                         | 1,163                                  | 0.064 | 49.27   | 3.18   | 1.000 | 0.99993 |
| 5603              | 4                    | 3.12                        | 74                    | 3,670                         | 1,290                                  | 0.057 | 49.59   | 2.84   | 1.000 | 0.99993 |
| 5902              | 2                    | 2.25                        | 29                    | 1,961                         | 1,012                                  | 0.029 | 67.62   | 1.94   | 1.000 | 0.99996 |
| 5903              | 2                    | 7.77                        | 186                   | 24,571                        | 256                                    | 0.727 | 132.10  | 95.98  | 1.069 | 0.99778 |
| 5904              | 4                    | 6.69                        | 70                    | 4,515                         | 1,223                                  | 0.057 | 64.50   | 3.69   | 1.014 | 0.99991 |
| 5905              | 6                    | 4.40                        | 367                   | 16,916                        | 1,876                                  | 0.196 | 46.09   | 9.02   | 1.412 | 0.99979 |
| 6024              | 1                    | 0.70                        | 35                    | 1,471                         | 393                                    | 0.089 | 42.03   | 3.74   | 1.000 | 0.99991 |
| 6141              | 4                    | 11.80                       | 1,007                 | 205,837                       | 636                                    | 1.583 | 204.41  | 323.64 | 1.583 | 0.99251 |
| 6142              | 2                    | 6.69                        | 618                   | 124,058                       | 309                                    | 2.000 | 200.74  | 401.48 | 2.000 | 0.99071 |
| 6143              | 2                    | 2.14                        | 2                     | 128                           | 372                                    | 0.005 | 64.00   | 0.34   | 1.000 | 0.99999 |
| 6144              | 1                    | 3.28                        | 1                     | 197                           | 317                                    | 0.003 | 197.00  | 0.62   | 1.000 | 0.99999 |
|                   | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL<br>CUSTOMERS<br>SERVED           | SAIFI | CAIDI   | SAIDI  | CAIFI | ASAI    |
| Total:            | 376                  | 563.86                      | 19,977                | 1,941,762                     | 164,936                                | 0.121 | 97.20   | 11.77  | 1.185 | 0.99973 |

**THE EMPIRE DISTRICT ELECTRIC COMPANY**  
**CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI**  
6/1/2017 to 6/30/2017  
EXCLUDING MAJOR EVENT DAYS

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 1050              | 2                    | 4.22                        | 50                    | 2,507                         | 1,597                                  | 0.031 | 50.14  | 1.57  | 1.000 | 0.99996 |
| 1051              | 4                    | 7.54                        | 4                     | 452                           | 1,067                                  | 0.004 | 113.00 | 0.42  | 1.000 | 0.99999 |
| 1052              | 2                    | 2.33                        | 2                     | 140                           | 1,159                                  | 0.002 | 70.00  | 0.12  | 1.000 | 0.99999 |
| 1082              | 7                    | 7.14                        | 7                     | 428                           | 1,330                                  | 0.005 | 61.14  | 0.32  | 1.000 | 0.99999 |
| 1084              | 2                    | 1.95                        | 2                     | 117                           | 5                                      | 0.400 | 58.50  | 23.40 | 2.000 | 0.99946 |
| 1091              | 2                    | 2.33                        | 60                    | 6,200                         | 692                                    | 0.087 | 103.33 | 8.96  | 1.017 | 0.99979 |
| 1092              | 5                    | 6.30                        | 261                   | 17,730                        | 971                                    | 0.269 | 67.93  | 18.26 | 1.088 | 0.99958 |
| 1093              | 1                    | 2.82                        | 1                     | 169                           | 239                                    | 0.004 | 169.00 | 0.71  | 1.000 | 0.99998 |
| 1094              | 4                    | 4.52                        | 41                    | 1,676                         | 1,237                                  | 0.033 | 40.88  | 1.35  | 1.000 | 0.99997 |
| 1103              | 3                    | 2.55                        | 3                     | 153                           | 979                                    | 0.003 | 51.00  | 0.16  | 1.000 | 0.99999 |
| 1141              | 2                    | 1.18                        | 2                     | 71                            | 902                                    | 0.002 | 35.50  | 0.08  | 1.000 | 0.99999 |
| 1211              | 5                    | 6.39                        | 27                    | 1,492                         | 1,479                                  | 0.018 | 55.26  | 1.01  | 1.174 | 0.99998 |
| 1213              | 5                    | 7.90                        | 33                    | 2,959                         | 554                                    | 0.060 | 89.67  | 5.34  | 1.100 | 0.99988 |
| 1232              | 2                    | 2.84                        | 174                   | 19,449                        | 1,183                                  | 0.147 | 111.78 | 16.44 | 1.000 | 0.99962 |
| 1241              | 1                    | 1.85                        | 1                     | 111                           | 853                                    | 0.001 | 111.00 | 0.13  | 1.000 | 0.99999 |
| 1243              | 1                    | 1.15                        | 1                     | 69                            | 1,199                                  | 0.001 | 69.00  | 0.06  | 1.000 | 0.99999 |
| 1261              | 1                    | 3.60                        | 1                     | 216                           | 397                                    | 0.003 | 216.00 | 0.54  | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 1263              | 1                    | 0.60                        | 34                    | 1,251                         | 1,138                                  | 0.030 | 36.79  | 1.10  | 1.000 | 0.99997 |
| 1271              | 4                    | 4.35                        | 16                    | 849                           | 962                                    | 0.017 | 53.06  | 0.88  | 1.143 | 0.99998 |
| 1273              | 2                    | 2.04                        | 2                     | 122                           | 865                                    | 0.002 | 61.00  | 0.14  | 1.000 | 0.99999 |
| 1282              | 4                    | 2.95                        | 272                   | 10,718                        | 693                                    | 0.392 | 39.40  | 15.47 | 1.004 | 0.99964 |
| 1284              | 1                    | 0.90                        | 1                     | 54                            | 948                                    | 0.001 | 54.00  | 0.06  | 1.000 | 0.99999 |
| 1285              | 2                    | 6.63                        | 231                   | 56,498                        | 1,094                                  | 0.211 | 244.58 | 51.64 | 1.000 | 0.99880 |
| 1451              | 1                    | 1.73                        | 4                     | 419                           | 526                                    | 0.008 | 104.75 | 0.80  | 1.000 | 0.99998 |
| 1452              | 1                    | 1.12                        | 1                     | 67                            | 449                                    | 0.002 | 67.00  | 0.15  | 1.000 | 0.99999 |
| 1453              | 2                    | 2.23                        | 27                    | 2,183                         | 1,797                                  | 0.015 | 80.85  | 1.21  | 1.000 | 0.99997 |
| 1455              | 1                    | 3.00                        | 1                     | 180                           | 389                                    | 0.003 | 180.00 | 0.46  | 1.000 | 0.99999 |
| 1523              | 4                    | 6.56                        | 728                   | 65,171                        | 723                                    | 1.007 | 89.52  | 90.14 | 1.806 | 0.99791 |
| 1842              | 1                    | 1.60                        | 1                     | 96                            | 281                                    | 0.004 | 96.00  | 0.34  | 1.000 | 0.99999 |
| 1843              | 4                    | 4.34                        | 15                    | 881                           | 1,086                                  | 0.014 | 58.73  | 0.81  | 1.000 | 0.99998 |
| 2052              | 2                    | 1.78                        | 2                     | 107                           | 85                                     | 0.024 | 53.50  | 1.26  | 1.000 | 0.99997 |
| 2092              | 1                    | 1.23                        | 1                     | 74                            | 917                                    | 0.001 | 74.00  | 0.08  | 1.000 | 0.99999 |
| 2171              | 1                    | 0.67                        | 1                     | 40                            | 564                                    | 0.002 | 40.00  | 0.07  | 1.000 | 0.99999 |
| 2211              | 3                    | 3.16                        | 56                    | 3,216                         | 723                                    | 0.077 | 57.43  | 4.45  | 1.018 | 0.99990 |
| 2212              | 5                    | 7.48                        | 58                    | 4,785                         | 1,294                                  | 0.045 | 82.50  | 3.70  | 1.018 | 0.99991 |
| 2621              | 3                    | 5.94                        | 269                   | 24,891                        | 1,166                                  | 0.231 | 92.53  | 21.35 | 1.007 | 0.99951 |
| 2952              | 1                    | 0.72                        | 26                    | 1,108                         | 154                                    | 0.169 | 42.62  | 7.19  | 1.000 | 0.99983 |
| 2961              | 1                    | 6.82                        | 103                   | 42,157                        | 648                                    | 0.159 | 409.29 | 65.06 | 1.000 | 0.99849 |
| 3082              | 1                    | 1.88                        | 1                     | 113                           | 322                                    | 0.003 | 113.00 | 0.35  | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 3122              | 3                    | 5.37                        | 6                     | 706                           | 849                                    | 0.007 | 117.67 | 0.83  | 1.000 | 0.99998 |
| 3123              | 2                    | 4.70                        | 2                     | 282                           | 1,050                                  | 0.002 | 141.00 | 0.27  | 1.000 | 0.99999 |
| 3181              | 1                    | 1.37                        | 1                     | 82                            | 724                                    | 0.001 | 82.00  | 0.11  | 1.000 | 0.99999 |
| 3221              | 7                    | 11.49                       | 149                   | 13,999                        | 1,241                                  | 0.120 | 93.95  | 11.28 | 6.478 | 0.99974 |
| 3222              | 2                    | 3.71                        | 11                    | 1,408                         | 771                                    | 0.014 | 128.00 | 1.83  | 1.000 | 0.99996 |
| 3231              | 1                    | 1.97                        | 1                     | 118                           | 202                                    | 0.005 | 118.00 | 0.58  | 1.000 | 0.99999 |
| 3232              | 2                    | 2.45                        | 10                    | 609                           | 427                                    | 0.023 | 60.90  | 1.43  | 1.111 | 0.99997 |
| 3301              | 1                    | 1.13                        | 13                    | 892                           | 196                                    | 0.066 | 68.62  | 4.55  | 1.000 | 0.99989 |
| 3302              | 1                    | 1.07                        | 3                     | 194                           | 899                                    | 0.003 | 64.67  | 0.22  | 1.000 | 0.99999 |
| 3303              | 3                    | 3.11                        | 45                    | 2,529                         | 979                                    | 0.046 | 56.20  | 2.58  | 1.023 | 0.99994 |
| 3311              | 1                    | 0.73                        | 533                   | 23,700                        | 534                                    | 0.998 | 44.47  | 44.38 | 1.000 | 0.99897 |
| 3312              | 1                    | 1.02                        | 399                   | 24,718                        | 399                                    | 1.000 | 61.95  | 61.95 | 1.000 | 0.99857 |
| 3313              | 3                    | 2.78                        | 1,353                 | 84,787                        | 1,336                                  | 1.013 | 62.67  | 63.46 | 1.013 | 0.99853 |
| 3314              | 2                    | 1.37                        | 220                   | 9,620                         | 222                                    | 0.991 | 43.73  | 43.33 | 1.005 | 0.99900 |
| 3315              | 3                    | 6.14                        | 1,590                 | 71,937                        | 1,579                                  | 1.007 | 45.24  | 45.56 | 1.007 | 0.99895 |
| 3421              | 1                    | 1.38                        | 1                     | 83                            | 294                                    | 0.003 | 83.00  | 0.28  | 1.000 | 0.99999 |
| 3422              | 4                    | 9.25                        | 35                    | 3,773                         | 971                                    | 0.036 | 107.80 | 3.89  | 1.029 | 0.99991 |
| 3423              | 2                    | 4.20                        | 25                    | 2,690                         | 386                                    | 0.065 | 107.60 | 6.97  | 1.042 | 0.99984 |
| 3472              | 3                    | 2.02                        | 7                     | 221                           | 1,580                                  | 0.004 | 31.57  | 0.14  | 1.000 | 0.99999 |
| 3551              | 3                    | 2.70                        | 86                    | 5,552                         | 1,031                                  | 0.083 | 64.56  | 5.39  | 1.012 | 0.99988 |
| 3552              | 1                    | 0.53                        | 1                     | 32                            | 575                                    | 0.002 | 32.00  | 0.06  | 1.000 | 0.99999 |
| 3553              | 3                    | 3.60                        | 18                    | 1,804                         | 1,045                                  | 0.017 | 100.22 | 1.73  | 1.000 | 0.99996 |



| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 3591              | 1                    | 1.62                        | 1                     | 97                            | 1,202                                  | 0.001 | 97.00  | 0.08   | 1.000 | 0.99999 |
| 3592              | 4                    | 5.04                        | 29                    | 2,794                         | 1,747                                  | 0.017 | 96.34  | 1.60   | 1.074 | 0.99996 |
| 3594              | 10                   | 9.93                        | 47                    | 3,506                         | 680                                    | 0.069 | 74.60  | 5.16   | 1.000 | 0.99988 |
| 3621              | 7                    | 6.64                        | 29                    | 2,160                         | 1,552                                  | 0.019 | 74.48  | 1.39   | 1.706 | 0.99997 |
| 3661              | 3                    | 2.48                        | 89                    | 5,138                         | 1,022                                  | 0.087 | 57.73  | 5.03   | 1.000 | 0.99988 |
| 3662              | 4                    | 5.88                        | 1,429                 | 118,517                       | 779                                    | 1.834 | 82.94  | 152.14 | 1.834 | 0.99648 |
| 3663              | 1                    | 1.07                        | 11                    | 712                           | 734                                    | 0.015 | 64.73  | 0.97   | 1.000 | 0.99998 |
| 3664              | 2                    | 1.29                        | 31                    | 1,252                         | 549                                    | 0.056 | 40.39  | 2.28   | 1.033 | 0.99995 |
| 3691              | 3                    | 4.55                        | 1,165                 | 57,986                        | 1,163                                  | 1.002 | 49.77  | 49.86  | 1.002 | 0.99885 |
| 3692              | 1                    | 1.28                        | 7                     | 544                           | 410                                    | 0.017 | 77.71  | 1.33   | 1.000 | 0.99997 |
| 3693              | 1                    | 1.10                        | 21                    | 1,398                         | 186                                    | 0.113 | 66.57  | 7.52   | 1.000 | 0.99983 |
| 3694              | 2                    | 1.43                        | 12                    | 501                           | 1,328                                  | 0.009 | 41.75  | 0.38   | 1.000 | 0.99999 |
| 3701              | 1                    | 0.42                        | 1                     | 25                            | 485                                    | 0.002 | 25.00  | 0.05   | 1.000 | 0.99999 |
| 3702              | 1                    | 0.57                        | 8                     | 273                           | 611                                    | 0.013 | 34.13  | 0.45   | 1.000 | 0.99999 |
| 3751              | 3                    | 2.75                        | 3                     | 165                           | 882                                    | 0.003 | 55.00  | 0.19   | 1.000 | 0.99999 |
| 3871              | 2                    | 3.28                        | 2                     | 197                           | 1,387                                  | 0.001 | 98.50  | 0.14   | 1.000 | 0.99999 |
| 3872              | 3                    | 2.90                        | 38                    | 3,169                         | 1,067                                  | 0.036 | 83.39  | 2.97   | 1.000 | 0.99993 |
| 3873              | 1                    | 3.02                        | 87                    | 15,691                        | 796                                    | 0.109 | 180.36 | 19.71  | 1.000 | 0.99954 |
| 3878              | 3                    | 2.44                        | 14                    | 860                           | 792                                    | 0.018 | 61.43  | 1.09   | 1.000 | 0.99997 |
| 3891              | 2                    | 4.65                        | 10                    | 1,400                         | 455                                    | 0.022 | 140.00 | 3.08   | 1.111 | 0.99993 |
| 3893              | 7                    | 13.26                       | 17                    | 2,020                         | 1,111                                  | 0.015 | 118.82 | 1.82   | 1.000 | 0.99996 |
| 3894              | 1                    | 0.88                        | 1                     | 53                            | 116                                    | 0.009 | 53.00  | 0.46   | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 3901              | 2                    | 1.34                        | 24                    | 1,035                         | 874                                    | 0.027 | 43.13  | 1.18   | 1.000 | 0.99997 |
| 3912              | 1                    | 1.47                        | 1,121                 | 99,488                        | 1,160                                  | 0.966 | 88.75  | 85.77  | 1.000 | 0.99801 |
| 3913              | 1                    | 0.73                        | 1                     | 44                            | 810                                    | 0.001 | 44.00  | 0.05   | 1.000 | 0.99999 |
| 3914              | 2                    | 5.55                        | 47                    | 4,891                         | 373                                    | 0.126 | 104.06 | 13.11  | 1.000 | 0.99970 |
| 3951              | 3                    | 6.20                        | 27                    | 4,180                         | 929                                    | 0.029 | 154.81 | 4.50   | 1.038 | 0.99990 |
| 3952              | 10                   | 16.91                       | 110                   | 13,594                        | 1,273                                  | 0.086 | 123.58 | 10.68  | 1.000 | 0.99975 |
| 3953              | 2                    | 2.25                        | 2                     | 135                           | 521                                    | 0.004 | 67.50  | 0.26   | 1.000 | 0.99999 |
| 3981              | 9                    | 20.14                       | 930                   | 248,003                       | 1,503                                  | 0.619 | 266.67 | 165.01 | 1.080 | 0.99618 |
| 3982              | 4                    | 9.16                        | 237                   | 25,352                        | 1,769                                  | 0.134 | 106.97 | 14.33  | 1.000 | 0.99967 |
| 3991              | 5                    | 10.51                       | 83                    | 4,944                         | 726                                    | 0.114 | 59.57  | 6.81   | 1.051 | 0.99984 |
| 3992              | 1                    | 1.35                        | 1                     | 81                            | 166                                    | 0.006 | 81.00  | 0.49   | 1.000 | 0.99999 |
| 402               | 1                    | 0.75                        | 1                     | 45                            | 107                                    | 0.009 | 45.00  | 0.42   | 1.000 | 0.99999 |
| 4031              | 4                    | 5.19                        | 65                    | 4,802                         | 704                                    | 0.092 | 73.88  | 6.82   | 1.048 | 0.99984 |
| 4091              | 4                    | 7.10                        | 1,228                 | 123,543                       | 1,148                                  | 1.070 | 100.61 | 107.62 | 2.981 | 0.99751 |
| 4092              | 2                    | 2.87                        | 12                    | 958                           | 434                                    | 0.028 | 79.83  | 2.21   | 1.091 | 0.99995 |
| 4102              | 4                    | 5.05                        | 906                   | 76,131                        | 903                                    | 1.003 | 84.03  | 84.31  | 1.003 | 0.99805 |
| 4133              | 1                    | 0.88                        | 29                    | 1,557                         | 640                                    | 0.045 | 53.69  | 2.43   | 1.000 | 0.99994 |
| 4134              | 1                    | 1.05                        | 73                    | 4,637                         | 835                                    | 0.087 | 63.52  | 5.55   | 1.000 | 0.99987 |
| 4137              | 5                    | 3.93                        | 5                     | 236                           | 794                                    | 0.006 | 47.20  | 0.30   | 1.000 | 0.99999 |
| 4138              | 5                    | 3.15                        | 20                    | 854                           | 745                                    | 0.027 | 42.70  | 1.15   | 1.000 | 0.99997 |
| 4151              | 3                    | 5.08                        | 38                    | 1,884                         | 1,246                                  | 0.030 | 49.58  | 1.51   | 1.000 | 0.99996 |
| 4152              | 2                    | 2.17                        | 3                     | 177                           | 820                                    | 0.004 | 59.00  | 0.22   | 1.500 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 4153              | 5                    | 9.03                        | 19                    | 1,402                         | 1,285                                  | 0.015 | 73.79  | 1.09   | 1.000 | 0.99997 |
| 4172              | 1                    | 1.45                        | 4                     | 349                           | 1,726                                  | 0.002 | 87.25  | 0.20   | 1.000 | 0.99999 |
| 4173              | 2                    | 2.73                        | 46                    | 3,877                         | 634                                    | 0.073 | 84.28  | 6.12   | 1.000 | 0.99986 |
| 4181              | 1                    | 0.92                        | 20                    | 1,115                         | 625                                    | 0.032 | 55.75  | 1.78   | 1.000 | 0.99996 |
| 4212              | 1                    | 1.27                        | 30                    | 2,285                         | 819                                    | 0.037 | 76.17  | 2.79   | 1.000 | 0.99994 |
| 4223              | 1                    | 0.60                        | 1                     | 36                            | 828                                    | 0.001 | 36.00  | 0.04   | 1.000 | 0.99999 |
| 4303              | 2                    | 1.67                        | 33                    | 1,141                         | 982                                    | 0.034 | 34.58  | 1.16   | 1.031 | 0.99997 |
| 4313              | 1                    | 1.62                        | 1                     | 97                            | 535                                    | 0.002 | 97.00  | 0.18   | 1.000 | 0.99999 |
| 4324              | 1                    | 1.10                        | 17                    | 1,136                         | 1,255                                  | 0.014 | 66.82  | 0.91   | 1.000 | 0.99998 |
| 4332              | 1                    | 1.48                        | 1                     | 89                            | 319                                    | 0.003 | 89.00  | 0.28   | 1.000 | 0.99999 |
| 4333              | 1                    | 0.47                        | 683                   | 19,124                        | 683                                    | 1.000 | 28.00  | 28.00  | 1.000 | 0.99935 |
| 4341              | 10                   | 12.68                       | 162                   | 10,257                        | 1,781                                  | 0.091 | 63.31  | 5.76   | 1.237 | 0.99987 |
| 4342              | 5                    | 7.03                        | 127                   | 10,555                        | 1,752                                  | 0.072 | 83.11  | 6.02   | 1.067 | 0.99986 |
| 4343              | 2                    | 1.42                        | 5                     | 295                           | 1,025                                  | 0.005 | 59.00  | 0.29   | 1.250 | 0.99999 |
| 4363              | 2                    | 2.45                        | 2                     | 147                           | 1,691                                  | 0.001 | 73.50  | 0.09   | 1.000 | 0.99999 |
| 4371              | 3                    | 3.65                        | 40                    | 2,697                         | 1,543                                  | 0.026 | 67.43  | 1.75   | 1.026 | 0.99996 |
| 4372              | 1                    | 0.63                        | 1                     | 38                            | 440                                    | 0.002 | 38.00  | 0.09   | 1.000 | 0.99999 |
| 4373              | 5                    | 15.04                       | 1,025                 | 118,504                       | 776                                    | 1.321 | 115.61 | 152.71 | 1.319 | 0.99647 |
| 4381              | 1                    | 0.68                        | 1                     | 41                            | 332                                    | 0.003 | 41.00  | 0.12   | 1.000 | 0.99999 |
| 4385              | 2                    | 0.97                        | 2                     | 58                            | 1,122                                  | 0.002 | 29.00  | 0.05   | 1.000 | 0.99999 |
| 4431              | 3                    | 4.49                        | 3                     | 270                           | 1,387                                  | 0.002 | 90.00  | 0.19   | 1.000 | 0.99999 |
| 4432              | 2                    | 3.62                        | 12                    | 1,191                         | 462                                    | 0.026 | 99.25  | 2.58   | 1.000 | 0.99994 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI   | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|---------|--------|-------|---------|
| 4511              | 1                    | 0.43                        | 9                     | 242                           | 1,131                                  | 0.008 | 26.89   | 0.21   | 1.000 | 0.99999 |
| 455               | 2                    | 2.77                        | 2                     | 166                           | 168                                    | 0.012 | 83.00   | 0.99   | 1.000 | 0.99998 |
| 4602              | 5                    | 5.61                        | 221                   | 24,008                        | 947                                    | 0.233 | 108.63  | 25.35  | 1.052 | 0.99941 |
| 4692              | 1                    | 30.47                       | 1                     | 1,828                         | 470                                    | 0.002 | 1828.00 | 3.89   | 1.000 | 0.99991 |
| 4714              | 1                    | 1.85                        | 1                     | 111                           | 328                                    | 0.003 | 111.00  | 0.34   | 1.000 | 0.99999 |
| 5601              | 5                    | 3.15                        | 75                    | 3,695                         | 1,163                                  | 0.064 | 49.27   | 3.18   | 1.000 | 0.99993 |
| 5603              | 4                    | 3.12                        | 74                    | 3,670                         | 1,290                                  | 0.057 | 49.59   | 2.84   | 1.000 | 0.99993 |
| 5902              | 2                    | 2.25                        | 29                    | 1,961                         | 1,012                                  | 0.029 | 67.62   | 1.94   | 1.000 | 0.99996 |
| 5903              | 2                    | 7.77                        | 186                   | 24,571                        | 256                                    | 0.727 | 132.10  | 95.98  | 1.069 | 0.99778 |
| 5904              | 4                    | 6.69                        | 70                    | 4,515                         | 1,223                                  | 0.057 | 64.50   | 3.69   | 1.014 | 0.99991 |
| 5905              | 6                    | 4.40                        | 367                   | 16,916                        | 1,876                                  | 0.196 | 46.09   | 9.02   | 1.412 | 0.99979 |
| 6024              | 1                    | 0.70                        | 35                    | 1,471                         | 393                                    | 0.089 | 42.03   | 3.74   | 1.000 | 0.99991 |
| 6141              | 4                    | 11.80                       | 1,007                 | 205,837                       | 636                                    | 1.583 | 204.41  | 323.64 | 1.583 | 0.99251 |
| 6142              | 2                    | 6.69                        | 618                   | 124,058                       | 309                                    | 2.000 | 200.74  | 401.48 | 2.000 | 0.99071 |
| 6143              | 2                    | 2.14                        | 2                     | 128                           | 372                                    | 0.005 | 64.00   | 0.34   | 1.000 | 0.99999 |
| 6144              | 1                    | 3.28                        | 1                     | 197                           | 317                                    | 0.003 | 197.00  | 0.62   | 1.000 | 0.99999 |
|                   | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL<br>CUSTOMERS<br>SERVED           | SAIFI | CAIDI   | SAIDI  | CAIFI | ASAI    |
| Total:            | 376                  | 563.86                      | 19,977                | 1,941,762                     | 164,936                                | 0.121 | 97.20   | 11.77  | 1.185 | 0.99973 |

**THE EMPIRE DISTRICT ELECTRIC COMPANY**  
**CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI**  
7/1/2017 to 7/31/2017  
INCLUDING MAJOR EVENT DAYS

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 1050              | 1                    | 1.12                        | 38                    | 2,556                         | 1,602                                  | 0.024 | 67.26  | 1.60  | 1.000 | 0.99996 |
| 1051              | 1                    | 1.35                        | 167                   | 13,655                        | 606                                    | 0.276 | 81.77  | 22.53 | 1.000 | 0.99950 |
| 1082              | 1                    | 1.55                        | 21                    | 1,968                         | 1,335                                  | 0.016 | 93.71  | 1.47  | 1.000 | 0.99997 |
| 1092              | 1                    | 2.63                        | 1                     | 158                           | 972                                    | 0.001 | 158.00 | 0.16  | 1.000 | 0.99999 |
| 1093              | 3                    | 3.59                        | 3                     | 216                           | 239                                    | 0.013 | 72.00  | 0.90  | 1.000 | 0.99998 |
| 1094              | 2                    | 4.61                        | 5                     | 842                           | 1,234                                  | 0.004 | 168.40 | 0.68  | 1.000 | 0.99998 |
| 1101              | 2                    | 2.02                        | 21                    | 1,296                         | 164                                    | 0.128 | 61.71  | 7.90  | 1.050 | 0.99982 |
| 1211              | 4                    | 4.42                        | 39                    | 2,173                         | 1,480                                  | 0.026 | 55.72  | 1.47  | 1.219 | 0.99997 |
| 1213              | 6                    | 6.96                        | 6                     | 418                           | 554                                    | 0.011 | 69.67  | 0.75  | 1.000 | 0.99998 |
| 1230              | 1                    | 1.55                        | 17                    | 1,593                         | 1,177                                  | 0.014 | 93.71  | 1.35  | 1.000 | 0.99997 |
| 1232              | 2                    | 3.14                        | 102                   | 7,253                         | 1,184                                  | 0.086 | 71.11  | 6.13  | 1.010 | 0.99986 |
| 1241              | 1                    | 0.88                        | 56                    | 2,996                         | 854                                    | 0.066 | 53.50  | 3.51  | 1.000 | 0.99992 |
| 1242              | 1                    | 1.18                        | 1                     | 71                            | 680                                    | 0.001 | 71.00  | 0.10  | 1.000 | 0.99999 |
| 1261              | 1                    | 3.08                        | 1                     | 185                           | 398                                    | 0.003 | 185.00 | 0.46  | 1.000 | 0.99999 |
| 1265              | 4                    | 9.65                        | 960                   | 72,954                        | 1,282                                  | 0.749 | 75.99  | 56.91 | 1.137 | 0.99873 |
| 1281              | 1                    | 6.02                        | 1                     | 361                           | 167                                    | 0.006 | 361.00 | 2.16  | 1.000 | 0.99995 |
| 1282              | 1                    | 2.00                        | 22                    | 2,652                         | 693                                    | 0.032 | 120.55 | 3.83  | 1.000 | 0.99991 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 1283              | 1                    | 0.58                        | 1                     | 35                            | 370                                    | 0.003 | 35.00  | 0.09   | 1.000 | 0.99999 |
| 1311              | 1                    | 1.43                        | 1                     | 86                            | 272                                    | 0.004 | 86.00  | 0.32   | 1.000 | 0.99999 |
| 1312              | 2                    | 2.19                        | 273                   | 29,673                        | 936                                    | 0.292 | 108.69 | 31.70  | 1.038 | 0.99929 |
| 1451              | 12                   | 18.29                       | 3,093                 | 259,155                       | 527                                    | 5.869 | 83.79  | 491.76 | 2.051 | 0.98898 |
| 1452              | 1                    | 0.52                        | 1                     | 31                            | 449                                    | 0.002 | 31.00  | 0.07   | 1.000 | 0.99999 |
| 1453              | 3                    | 3.68                        | 179                   | 19,582                        | 1,797                                  | 0.100 | 109.40 | 10.90  | 1.047 | 0.99976 |
| 1455              | 3                    | 3.32                        | 31                    | 2,701                         | 390                                    | 0.079 | 87.13  | 6.93   | 1.292 | 0.99984 |
| 1523              | 2                    | 2.69                        | 2                     | 161                           | 727                                    | 0.003 | 80.50  | 0.22   | 1.000 | 0.99999 |
| 2051              | 1                    | 0.92                        | 1                     | 55                            | 165                                    | 0.006 | 55.00  | 0.33   | 1.000 | 0.99999 |
| 2052              | 1                    | 1.65                        | 1                     | 99                            | 85                                     | 0.012 | 99.00  | 1.16   | 1.000 | 0.99997 |
| 2092              | 1                    | 1.03                        | 6                     | 372                           | 918                                    | 0.007 | 62.00  | 0.41   | 1.000 | 0.99999 |
| 2171              | 2                    | 2.90                        | 2                     | 174                           | 564                                    | 0.004 | 87.00  | 0.31   | 1.000 | 0.99999 |
| 2172              | 1                    | 1.60                        | 5                     | 484                           | 223                                    | 0.022 | 96.80  | 2.17   | 1.000 | 0.99995 |
| 2211              | 6                    | 5.22                        | 20                    | 1,237                         | 723                                    | 0.028 | 61.85  | 1.71   | 1.053 | 0.99996 |
| 2212              | 4                    | 6.55                        | 27                    | 2,286                         | 1,294                                  | 0.021 | 84.67  | 1.77   | 1.080 | 0.99996 |
| 2511              | 5                    | 7.08                        | 24                    | 1,517                         | 618                                    | 0.039 | 63.21  | 2.45   | 1.000 | 0.99995 |
| 2621              | 1                    | 1.70                        | 1                     | 102                           | 1,168                                  | 0.001 | 102.00 | 0.09   | 1.000 | 0.99999 |
| 2951              | 3                    | 4.20                        | 115                   | 4,012                         | 1,398                                  | 0.082 | 34.89  | 2.87   | 1.055 | 0.99994 |
| 3082              | 1                    | 0.98                        | 1                     | 59                            | 322                                    | 0.003 | 59.00  | 0.18   | 1.000 | 0.99999 |
| 3121              | 2                    | 1.87                        | 143                   | 8,378                         | 1,132                                  | 0.126 | 58.59  | 7.40   | 1.000 | 0.99983 |
| 3122              | 1                    | 5.48                        | 12                    | 3,954                         | 850                                    | 0.014 | 329.50 | 4.65   | 1.000 | 0.99990 |
| 3123              | 1                    | 0.98                        | 12                    | 715                           | 1,052                                  | 0.011 | 59.58  | 0.68   | 1.000 | 0.99998 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 3221              | 4                    | 9.84                        | 29                    | 3,368                         | 1,243                                  | 0.023 | 116.14 | 2.71  | 1.036 | 0.99994 |
| 3222              | 2                    | 5.49                        | 2                     | 329                           | 772                                    | 0.003 | 164.50 | 0.43  | 1.000 | 0.99999 |
| 3231              | 2                    | 2.47                        | 41                    | 2,739                         | 202                                    | 0.203 | 66.80  | 13.56 | 1.025 | 0.99970 |
| 3311              | 1                    | 1.98                        | 1                     | 119                           | 535                                    | 0.002 | 119.00 | 0.22  | 1.000 | 0.99999 |
| 3315              | 1                    | 4.37                        | 10                    | 2,626                         | 1,580                                  | 0.006 | 262.60 | 1.66  | 1.000 | 0.99996 |
| 3472              | 6                    | 4.63                        | 182                   | 13,555                        | 1,581                                  | 0.115 | 74.48  | 8.57  | 1.028 | 0.99981 |
| 3553              | 5                    | 9.37                        | 53                    | 6,513                         | 1,045                                  | 0.051 | 122.89 | 6.23  | 1.128 | 0.99986 |
| 3591              | 3                    | 5.08                        | 52                    | 5,416                         | 1,212                                  | 0.043 | 104.15 | 4.47  | 1.020 | 0.99990 |
| 3592              | 1                    | 0.25                        | 18                    | 284                           | 1,728                                  | 0.010 | 15.78  | 0.16  | 1.000 | 0.99999 |
| 3593              | 1                    | 5.13                        | 67                    | 20,684                        | 929                                    | 0.072 | 308.72 | 22.26 | 1.000 | 0.99950 |
| 3621              | 1                    | 1.02                        | 1                     | 61                            | 1,554                                  | 0.001 | 61.00  | 0.04  | 1.000 | 0.99999 |
| 3661              | 3                    | 8.35                        | 106                   | 22,279                        | 1,024                                  | 0.104 | 210.18 | 21.76 | 1.000 | 0.99951 |
| 3662              | 2                    | 7.07                        | 19                    | 3,127                         | 781                                    | 0.024 | 164.58 | 4.00  | 1.000 | 0.99991 |
| 3663              | 1                    | 1.18                        | 18                    | 1,281                         | 736                                    | 0.024 | 71.17  | 1.74  | 1.000 | 0.99996 |
| 3664              | 4                    | 5.78                        | 52                    | 3,090                         | 549                                    | 0.095 | 59.42  | 5.63  | 1.040 | 0.99987 |
| 3675              | 1                    | 0.95                        | 23                    | 1,332                         | 415                                    | 0.055 | 57.91  | 3.21  | 1.000 | 0.99993 |
| 3691              | 3                    | 1.48                        | 3                     | 89                            | 1,163                                  | 0.003 | 29.67  | 0.08  | 1.000 | 0.99999 |
| 3702              | 1                    | 0.60                        | 19                    | 691                           | 611                                    | 0.031 | 36.37  | 1.13  | 1.000 | 0.99997 |
| 3871              | 1                    | 1.17                        | 29                    | 2,034                         | 1,420                                  | 0.020 | 70.14  | 1.43  | 1.000 | 0.99997 |
| 3872              | 1                    | 1.20                        | 28                    | 2,035                         | 1,067                                  | 0.026 | 72.68  | 1.91  | 1.000 | 0.99996 |
| 3873              | 2                    | 1.20                        | 2                     | 72                            | 797                                    | 0.003 | 36.00  | 0.09  | 1.000 | 0.99999 |
| 3878              | 1                    | 0.95                        | 1                     | 57                            | 794                                    | 0.001 | 57.00  | 0.07  | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI   | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|---------|-------|---------|
| 3891              | 4                    | 9.81                        | 2,214                 | 488,796                       | 456                                    | 4.855 | 220.78 | 1071.92 | 2.002 | 0.97599 |
| 3892              | 2                    | 1.00                        | 172                   | 5,608                         | 1,389                                  | 0.124 | 32.60  | 4.04    | 1.000 | 0.99991 |
| 3893              | 6                    | 7.90                        | 105                   | 8,358                         | 1,113                                  | 0.094 | 79.60  | 7.51    | 1.050 | 0.99983 |
| 3894              | 1                    | 1.12                        | 1                     | 67                            | 116                                    | 0.009 | 67.00  | 0.58    | 1.000 | 0.99999 |
| 3901              | 7                    | 8.84                        | 1,805                 | 70,214                        | 876                                    | 2.061 | 38.90  | 80.15   | 2.056 | 0.99820 |
| 3902              | 2                    | 3.70                        | 2                     | 222                           | 88                                     | 0.023 | 111.00 | 2.52    | 1.000 | 0.99994 |
| 3913              | 1                    | 1.95                        | 53                    | 6,217                         | 814                                    | 0.065 | 117.30 | 7.64    | 1.000 | 0.99983 |
| 3914              | 1                    | 1.00                        | 11                    | 661                           | 374                                    | 0.029 | 60.09  | 1.77    | 1.000 | 0.99996 |
| 3951              | 4                    | 4.93                        | 27                    | 2,425                         | 930                                    | 0.029 | 89.81  | 2.61    | 1.080 | 0.99994 |
| 3952              | 1                    | 1.10                        | 1                     | 66                            | 1,273                                  | 0.001 | 66.00  | 0.05    | 1.000 | 0.99999 |
| 3953              | 1                    | 1.33                        | 1                     | 80                            | 522                                    | 0.002 | 80.00  | 0.15    | 1.000 | 0.99999 |
| 3981              | 2                    | 1.32                        | 9                     | 485                           | 1,503                                  | 0.006 | 53.89  | 0.32    | 1.125 | 0.99999 |
| 3991              | 5                    | 5.68                        | 14                    | 1,039                         | 728                                    | 0.019 | 74.21  | 1.43    | 1.000 | 0.99997 |
| 4101              | 5                    | 5.47                        | 56                    | 4,454                         | 590                                    | 0.095 | 79.54  | 7.55    | 1.000 | 0.99983 |
| 4102              | 1                    | 4.53                        | 72                    | 19,651                        | 904                                    | 0.080 | 272.93 | 21.74   | 1.000 | 0.99951 |
| 4131              | 1                    | 3.52                        | 1                     | 211                           | 200                                    | 0.005 | 211.00 | 1.06    | 1.000 | 0.99998 |
| 4136              | 2                    | 3.74                        | 10                    | 936                           | 632                                    | 0.016 | 93.60  | 1.48    | 1.111 | 0.99997 |
| 4138              | 3                    | 2.12                        | 47                    | 2,216                         | 745                                    | 0.063 | 47.15  | 2.97    | 1.000 | 0.99993 |
| 4141              | 2                    | 1.60                        | 2                     | 96                            | 82                                     | 0.024 | 48.00  | 1.17    | 1.000 | 0.99997 |
| 4142              | 1                    | 3.40                        | 68                    | 13,928                        | 598                                    | 0.114 | 204.82 | 23.29   | 1.000 | 0.99948 |
| 4151              | 4                    | 4.57                        | 129                   | 8,582                         | 1,246                                  | 0.104 | 66.53  | 6.89    | 1.008 | 0.99985 |
| 4153              | 2                    | 7.00                        | 203                   | 26,282                        | 1,291                                  | 0.157 | 129.47 | 20.36   | 1.173 | 0.99954 |



| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 4172              | 1                    | 0.43                        | 1                     | 26                            | 1,726                                  | 0.001 | 26.00  | 0.02   | 1.000 | 0.99999 |
| 4173              | 3                    | 3.10                        | 40                    | 3,980                         | 634                                    | 0.063 | 99.50  | 6.28   | 1.053 | 0.99986 |
| 4181              | 1                    | 6.38                        | 15                    | 5,747                         | 624                                    | 0.024 | 383.13 | 9.21   | 1.000 | 0.99979 |
| 4182              | 2                    | 2.91                        | 2                     | 175                           | 894                                    | 0.002 | 87.50  | 0.20   | 1.000 | 0.99999 |
| 4211              | 1                    | 1.98                        | 1                     | 119                           | 708                                    | 0.001 | 119.00 | 0.17   | 1.000 | 0.99999 |
| 4212              | 5                    | 5.55                        | 77                    | 8,262                         | 820                                    | 0.094 | 107.30 | 10.08  | 1.000 | 0.99977 |
| 4222              | 26                   | 29.51                       | 1,070                 | 83,086                        | 1,045                                  | 1.024 | 77.65  | 79.51  | 1.198 | 0.99822 |
| 4223              | 4                    | 6.65                        | 838                   | 66,418                        | 872                                    | 0.961 | 79.26  | 76.17  | 1.012 | 0.99829 |
| 4224              | 1                    | 1.30                        | 695                   | 54,580                        | 756                                    | 0.919 | 78.53  | 72.20  | 1.000 | 0.99838 |
| 4303              | 1                    | 4.02                        | 1                     | 241                           | 988                                    | 0.001 | 241.00 | 0.24   | 1.000 | 0.99999 |
| 4312              | 2                    | 1.22                        | 14                    | 522                           | 844                                    | 0.017 | 37.29  | 0.62   | 1.000 | 0.99999 |
| 4324              | 2                    | 1.69                        | 1,254                 | 84,214                        | 1,257                                  | 0.998 | 67.16  | 67.00  | 1.001 | 0.99850 |
| 4341              | 3                    | 5.01                        | 29                    | 1,528                         | 1,799                                  | 0.016 | 52.69  | 0.85   | 1.036 | 0.99998 |
| 4342              | 5                    | 9.19                        | 5                     | 551                           | 1,758                                  | 0.003 | 110.20 | 0.31   | 1.000 | 0.99999 |
| 4343              | 1                    | 0.82                        | 61                    | 3,011                         | 1,026                                  | 0.059 | 49.36  | 2.93   | 1.000 | 0.99993 |
| 4361              | 1                    | 0.25                        | 1                     | 15                            | 1,282                                  | 0.001 | 15.00  | 0.01   | 1.000 | 0.99999 |
| 4362              | 4                    | 1.46                        | 4                     | 88                            | 828                                    | 0.005 | 22.00  | 0.11   | 1.000 | 0.99999 |
| 4363              | 7                    | 4.46                        | 23                    | 1,997                         | 1,695                                  | 0.014 | 86.83  | 1.18   | 1.045 | 0.99997 |
| 4371              | 6                    | 8.46                        | 1,647                 | 234,504                       | 1,544                                  | 1.067 | 142.38 | 151.88 | 1.068 | 0.99660 |
| 4372              | 9                    | 21.79                       | 506                   | 68,945                        | 440                                    | 1.150 | 136.25 | 156.69 | 1.150 | 0.99649 |
| 4373              | 1                    | 2.43                        | 777                   | 113,843                       | 778                                    | 0.999 | 146.52 | 146.33 | 1.000 | 0.99672 |
| 4386              | 1                    | 3.72                        | 7                     | 1,563                         | 1,658                                  | 0.004 | 223.29 | 0.94   | 1.000 | 0.99998 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 4431              | 4                    | 4.96                        | 5                     | 342                           | 1,387                                  | 0.004 | 68.40  | 0.25   | 1.000 | 0.99999 |
| 4432              | 1                    | 0.38                        | 1                     | 23                            | 462                                    | 0.002 | 23.00  | 0.05   | 1.000 | 0.99999 |
| 4511              | 3                    | 5.50                        | 93                    | 9,526                         | 1,132                                  | 0.082 | 102.43 | 8.42   | 1.000 | 0.99981 |
| 4512              | 1                    | 1.82                        | 1                     | 109                           | 1,016                                  | 0.001 | 109.00 | 0.11   | 1.000 | 0.99999 |
| 4601              | 1                    | 1.62                        | 7                     | 682                           | 416                                    | 0.017 | 97.43  | 1.64   | 1.000 | 0.99996 |
| 4692              | 3                    | 6.77                        | 13                    | 2,182                         | 470                                    | 0.028 | 167.85 | 4.64   | 1.083 | 0.99990 |
| 4714              | 2                    | 8.84                        | 26                    | 10,939                        | 328                                    | 0.079 | 420.73 | 33.35  | 1.040 | 0.99925 |
| 5601              | 9                    | 12.91                       | 120                   | 29,088                        | 1,168                                  | 0.103 | 242.40 | 24.90  | 1.008 | 0.99944 |
| 5602              | 2                    | 1.83                        | 2                     | 110                           | 681                                    | 0.003 | 55.00  | 0.16   | 1.000 | 0.99999 |
| 5603              | 4                    | 3.67                        | 132                   | 4,915                         | 1,290                                  | 0.102 | 37.23  | 3.81   | 1.650 | 0.99991 |
| 5901              | 3                    | 5.37                        | 1,487                 | 214,517                       | 680                                    | 2.187 | 144.26 | 315.47 | 2.193 | 0.99293 |
| 5902              | 5                    | 7.62                        | 2,107                 | 205,602                       | 1,012                                  | 2.082 | 97.58  | 203.16 | 2.082 | 0.99545 |
| 5903              | 3                    | 5.46                        | 529                   | 69,215                        | 256                                    | 2.066 | 130.84 | 270.37 | 2.066 | 0.99394 |
| 5904              | 3                    | 4.17                        | 2,447                 | 233,448                       | 1,223                                  | 2.001 | 95.40  | 190.88 | 2.001 | 0.99572 |
| 5905              | 7                    | 6.52                        | 3,826                 | 355,747                       | 1,876                                  | 2.039 | 92.98  | 189.63 | 2.039 | 0.99575 |
| 6141              | 1                    | 3.02                        | 1                     | 181                           | 634                                    | 0.002 | 181.00 | 0.29   | 1.000 | 0.99999 |
| 6143              | 2                    | 2.78                        | 76                    | 3,077                         | 372                                    | 0.204 | 40.49  | 8.27   | 1.013 | 0.99981 |
|                   | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL<br>CUSTOMERS<br>SERVED           | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
| Total:            | 334                  | 501.37                      | 29,112                | 3,071,708                     | 164,392                                | 0.177 | 105.51 | 18.69  | 1.492 | 0.99958 |

**THE EMPIRE DISTRICT ELECTRIC COMPANY**  
**CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI**  
7/1/2017 to 7/31/2017  
EXCLUDING MAJOR EVENT DAYS

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 1050              | 1                    | 1.12                        | 38                    | 2,556                         | 1,602                                  | 0.024 | 67.26  | 1.60  | 1.000 | 0.99996 |
| 1051              | 1                    | 1.35                        | 167                   | 13,655                        | 606                                    | 0.276 | 81.77  | 22.53 | 1.000 | 0.99950 |
| 1082              | 1                    | 1.55                        | 21                    | 1,968                         | 1,335                                  | 0.016 | 93.71  | 1.47  | 1.000 | 0.99997 |
| 1092              | 1                    | 2.63                        | 1                     | 158                           | 972                                    | 0.001 | 158.00 | 0.16  | 1.000 | 0.99999 |
| 1093              | 3                    | 3.59                        | 3                     | 216                           | 239                                    | 0.013 | 72.00  | 0.90  | 1.000 | 0.99998 |
| 1094              | 2                    | 4.61                        | 5                     | 842                           | 1,234                                  | 0.004 | 168.40 | 0.68  | 1.000 | 0.99998 |
| 1101              | 2                    | 2.02                        | 21                    | 1,296                         | 164                                    | 0.128 | 61.71  | 7.90  | 1.050 | 0.99982 |
| 1211              | 4                    | 4.42                        | 39                    | 2,173                         | 1,480                                  | 0.026 | 55.72  | 1.47  | 1.219 | 0.99997 |
| 1213              | 6                    | 6.96                        | 6                     | 418                           | 554                                    | 0.011 | 69.67  | 0.75  | 1.000 | 0.99998 |
| 1230              | 1                    | 1.55                        | 17                    | 1,593                         | 1,177                                  | 0.014 | 93.71  | 1.35  | 1.000 | 0.99997 |
| 1232              | 2                    | 3.14                        | 102                   | 7,253                         | 1,184                                  | 0.086 | 71.11  | 6.13  | 1.010 | 0.99986 |
| 1241              | 1                    | 0.88                        | 56                    | 2,996                         | 854                                    | 0.066 | 53.50  | 3.51  | 1.000 | 0.99992 |
| 1242              | 1                    | 1.18                        | 1                     | 71                            | 680                                    | 0.001 | 71.00  | 0.10  | 1.000 | 0.99999 |
| 1261              | 1                    | 3.08                        | 1                     | 185                           | 398                                    | 0.003 | 185.00 | 0.46  | 1.000 | 0.99999 |
| 1265              | 4                    | 9.65                        | 960                   | 72,954                        | 1,282                                  | 0.749 | 75.99  | 56.91 | 1.137 | 0.99873 |
| 1281              | 1                    | 6.02                        | 1                     | 361                           | 167                                    | 0.006 | 361.00 | 2.16  | 1.000 | 0.99995 |
| 1282              | 1                    | 2.00                        | 22                    | 2,652                         | 693                                    | 0.032 | 120.55 | 3.83  | 1.000 | 0.99991 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 1283              | 1                    | 0.58                        | 1                     | 35                            | 370                                    | 0.003 | 35.00  | 0.09   | 1.000 | 0.99999 |
| 1311              | 1                    | 1.43                        | 1                     | 86                            | 272                                    | 0.004 | 86.00  | 0.32   | 1.000 | 0.99999 |
| 1312              | 2                    | 2.19                        | 273                   | 29,673                        | 936                                    | 0.292 | 108.69 | 31.70  | 1.038 | 0.99929 |
| 1451              | 12                   | 18.29                       | 3,093                 | 259,155                       | 527                                    | 5.869 | 83.79  | 491.76 | 2.051 | 0.98898 |
| 1452              | 1                    | 0.52                        | 1                     | 31                            | 449                                    | 0.002 | 31.00  | 0.07   | 1.000 | 0.99999 |
| 1453              | 3                    | 3.68                        | 179                   | 19,582                        | 1,797                                  | 0.100 | 109.40 | 10.90  | 1.047 | 0.99976 |
| 1455              | 3                    | 3.32                        | 31                    | 2,701                         | 390                                    | 0.079 | 87.13  | 6.93   | 1.292 | 0.99984 |
| 1523              | 2                    | 2.69                        | 2                     | 161                           | 727                                    | 0.003 | 80.50  | 0.22   | 1.000 | 0.99999 |
| 2051              | 1                    | 0.92                        | 1                     | 55                            | 165                                    | 0.006 | 55.00  | 0.33   | 1.000 | 0.99999 |
| 2052              | 1                    | 1.65                        | 1                     | 99                            | 85                                     | 0.012 | 99.00  | 1.16   | 1.000 | 0.99997 |
| 2092              | 1                    | 1.03                        | 6                     | 372                           | 918                                    | 0.007 | 62.00  | 0.41   | 1.000 | 0.99999 |
| 2171              | 2                    | 2.90                        | 2                     | 174                           | 564                                    | 0.004 | 87.00  | 0.31   | 1.000 | 0.99999 |
| 2172              | 1                    | 1.60                        | 5                     | 484                           | 223                                    | 0.022 | 96.80  | 2.17   | 1.000 | 0.99995 |
| 2211              | 6                    | 5.22                        | 20                    | 1,237                         | 723                                    | 0.028 | 61.85  | 1.71   | 1.053 | 0.99996 |
| 2212              | 4                    | 6.55                        | 27                    | 2,286                         | 1,294                                  | 0.021 | 84.67  | 1.77   | 1.080 | 0.99996 |
| 2511              | 5                    | 7.08                        | 24                    | 1,517                         | 618                                    | 0.039 | 63.21  | 2.45   | 1.000 | 0.99995 |
| 2621              | 1                    | 1.70                        | 1                     | 102                           | 1,168                                  | 0.001 | 102.00 | 0.09   | 1.000 | 0.99999 |
| 2951              | 3                    | 4.20                        | 115                   | 4,012                         | 1,398                                  | 0.082 | 34.89  | 2.87   | 1.055 | 0.99994 |
| 3082              | 1                    | 0.98                        | 1                     | 59                            | 322                                    | 0.003 | 59.00  | 0.18   | 1.000 | 0.99999 |
| 3121              | 2                    | 1.87                        | 143                   | 8,378                         | 1,132                                  | 0.126 | 58.59  | 7.40   | 1.000 | 0.99983 |
| 3122              | 1                    | 5.48                        | 12                    | 3,954                         | 850                                    | 0.014 | 329.50 | 4.65   | 1.000 | 0.99990 |
| 3123              | 1                    | 0.98                        | 12                    | 715                           | 1,052                                  | 0.011 | 59.58  | 0.68   | 1.000 | 0.99998 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 3221              | 4                    | 9.84                        | 29                    | 3,368                         | 1,243                                  | 0.023 | 116.14 | 2.71  | 1.036 | 0.99994 |
| 3222              | 2                    | 5.49                        | 2                     | 329                           | 772                                    | 0.003 | 164.50 | 0.43  | 1.000 | 0.99999 |
| 3231              | 2                    | 2.47                        | 41                    | 2,739                         | 202                                    | 0.203 | 66.80  | 13.56 | 1.025 | 0.99970 |
| 3311              | 1                    | 1.98                        | 1                     | 119                           | 535                                    | 0.002 | 119.00 | 0.22  | 1.000 | 0.99999 |
| 3315              | 1                    | 4.37                        | 10                    | 2,626                         | 1,580                                  | 0.006 | 262.60 | 1.66  | 1.000 | 0.99996 |
| 3472              | 6                    | 4.63                        | 182                   | 13,555                        | 1,581                                  | 0.115 | 74.48  | 8.57  | 1.028 | 0.99981 |
| 3553              | 5                    | 9.37                        | 53                    | 6,513                         | 1,045                                  | 0.051 | 122.89 | 6.23  | 1.128 | 0.99986 |
| 3591              | 3                    | 5.08                        | 52                    | 5,416                         | 1,212                                  | 0.043 | 104.15 | 4.47  | 1.020 | 0.99990 |
| 3592              | 1                    | 0.25                        | 18                    | 284                           | 1,728                                  | 0.010 | 15.78  | 0.16  | 1.000 | 0.99999 |
| 3593              | 1                    | 5.13                        | 67                    | 20,684                        | 929                                    | 0.072 | 308.72 | 22.26 | 1.000 | 0.99950 |
| 3621              | 1                    | 1.02                        | 1                     | 61                            | 1,554                                  | 0.001 | 61.00  | 0.04  | 1.000 | 0.99999 |
| 3661              | 3                    | 8.35                        | 106                   | 22,279                        | 1,024                                  | 0.104 | 210.18 | 21.76 | 1.000 | 0.99951 |
| 3662              | 2                    | 7.07                        | 19                    | 3,127                         | 781                                    | 0.024 | 164.58 | 4.00  | 1.000 | 0.99991 |
| 3663              | 1                    | 1.18                        | 18                    | 1,281                         | 736                                    | 0.024 | 71.17  | 1.74  | 1.000 | 0.99996 |
| 3664              | 4                    | 5.78                        | 52                    | 3,090                         | 549                                    | 0.095 | 59.42  | 5.63  | 1.040 | 0.99987 |
| 3675              | 1                    | 0.95                        | 23                    | 1,332                         | 415                                    | 0.055 | 57.91  | 3.21  | 1.000 | 0.99993 |
| 3691              | 3                    | 1.48                        | 3                     | 89                            | 1,163                                  | 0.003 | 29.67  | 0.08  | 1.000 | 0.99999 |
| 3702              | 1                    | 0.60                        | 19                    | 691                           | 611                                    | 0.031 | 36.37  | 1.13  | 1.000 | 0.99997 |
| 3871              | 1                    | 1.17                        | 29                    | 2,034                         | 1,420                                  | 0.020 | 70.14  | 1.43  | 1.000 | 0.99997 |
| 3872              | 1                    | 1.20                        | 28                    | 2,035                         | 1,067                                  | 0.026 | 72.68  | 1.91  | 1.000 | 0.99996 |
| 3873              | 2                    | 1.20                        | 2                     | 72                            | 797                                    | 0.003 | 36.00  | 0.09  | 1.000 | 0.99999 |
| 3878              | 1                    | 0.95                        | 1                     | 57                            | 794                                    | 0.001 | 57.00  | 0.07  | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI   | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|---------|-------|---------|
| 3891              | 4                    | 9.81                        | 2,214                 | 488,796                       | 456                                    | 4.855 | 220.78 | 1071.92 | 2.002 | 0.97599 |
| 3892              | 2                    | 1.00                        | 172                   | 5,608                         | 1,389                                  | 0.124 | 32.60  | 4.04    | 1.000 | 0.99991 |
| 3893              | 6                    | 7.90                        | 105                   | 8,358                         | 1,113                                  | 0.094 | 79.60  | 7.51    | 1.050 | 0.99983 |
| 3894              | 1                    | 1.12                        | 1                     | 67                            | 116                                    | 0.009 | 67.00  | 0.58    | 1.000 | 0.99999 |
| 3901              | 7                    | 8.84                        | 1,805                 | 70,214                        | 876                                    | 2.061 | 38.90  | 80.15   | 2.056 | 0.99820 |
| 3902              | 2                    | 3.70                        | 2                     | 222                           | 88                                     | 0.023 | 111.00 | 2.52    | 1.000 | 0.99994 |
| 3913              | 1                    | 1.95                        | 53                    | 6,217                         | 814                                    | 0.065 | 117.30 | 7.64    | 1.000 | 0.99983 |
| 3914              | 1                    | 1.00                        | 11                    | 661                           | 374                                    | 0.029 | 60.09  | 1.77    | 1.000 | 0.99996 |
| 3951              | 4                    | 4.93                        | 27                    | 2,425                         | 930                                    | 0.029 | 89.81  | 2.61    | 1.080 | 0.99994 |
| 3952              | 1                    | 1.10                        | 1                     | 66                            | 1,273                                  | 0.001 | 66.00  | 0.05    | 1.000 | 0.99999 |
| 3953              | 1                    | 1.33                        | 1                     | 80                            | 522                                    | 0.002 | 80.00  | 0.15    | 1.000 | 0.99999 |
| 3981              | 2                    | 1.32                        | 9                     | 485                           | 1,503                                  | 0.006 | 53.89  | 0.32    | 1.125 | 0.99999 |
| 3991              | 5                    | 5.68                        | 14                    | 1,039                         | 728                                    | 0.019 | 74.21  | 1.43    | 1.000 | 0.99997 |
| 4101              | 5                    | 5.47                        | 56                    | 4,454                         | 590                                    | 0.095 | 79.54  | 7.55    | 1.000 | 0.99983 |
| 4102              | 1                    | 4.53                        | 72                    | 19,651                        | 904                                    | 0.080 | 272.93 | 21.74   | 1.000 | 0.99951 |
| 4131              | 1                    | 3.52                        | 1                     | 211                           | 200                                    | 0.005 | 211.00 | 1.06    | 1.000 | 0.99998 |
| 4136              | 2                    | 3.74                        | 10                    | 936                           | 632                                    | 0.016 | 93.60  | 1.48    | 1.111 | 0.99997 |
| 4138              | 3                    | 2.12                        | 47                    | 2,216                         | 745                                    | 0.063 | 47.15  | 2.97    | 1.000 | 0.99993 |
| 4141              | 2                    | 1.60                        | 2                     | 96                            | 82                                     | 0.024 | 48.00  | 1.17    | 1.000 | 0.99997 |
| 4142              | 1                    | 3.40                        | 68                    | 13,928                        | 598                                    | 0.114 | 204.82 | 23.29   | 1.000 | 0.99948 |
| 4151              | 4                    | 4.57                        | 129                   | 8,582                         | 1,246                                  | 0.104 | 66.53  | 6.89    | 1.008 | 0.99985 |
| 4153              | 2                    | 7.00                        | 203                   | 26,282                        | 1,291                                  | 0.157 | 129.47 | 20.36   | 1.173 | 0.99954 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 4172              | 1                    | 0.43                        | 1                     | 26                            | 1,726                                  | 0.001 | 26.00  | 0.02   | 1.000 | 0.99999 |
| 4173              | 3                    | 3.10                        | 40                    | 3,980                         | 634                                    | 0.063 | 99.50  | 6.28   | 1.053 | 0.99986 |
| 4181              | 1                    | 6.38                        | 15                    | 5,747                         | 624                                    | 0.024 | 383.13 | 9.21   | 1.000 | 0.99979 |
| 4182              | 2                    | 2.91                        | 2                     | 175                           | 894                                    | 0.002 | 87.50  | 0.20   | 1.000 | 0.99999 |
| 4211              | 1                    | 1.98                        | 1                     | 119                           | 708                                    | 0.001 | 119.00 | 0.17   | 1.000 | 0.99999 |
| 4212              | 5                    | 5.55                        | 77                    | 8,262                         | 820                                    | 0.094 | 107.30 | 10.08  | 1.000 | 0.99977 |
| 4222              | 26                   | 29.51                       | 1,070                 | 83,086                        | 1,045                                  | 1.024 | 77.65  | 79.51  | 1.198 | 0.99822 |
| 4223              | 4                    | 6.65                        | 838                   | 66,418                        | 872                                    | 0.961 | 79.26  | 76.17  | 1.012 | 0.99829 |
| 4224              | 1                    | 1.30                        | 695                   | 54,580                        | 756                                    | 0.919 | 78.53  | 72.20  | 1.000 | 0.99838 |
| 4303              | 1                    | 4.02                        | 1                     | 241                           | 988                                    | 0.001 | 241.00 | 0.24   | 1.000 | 0.99999 |
| 4312              | 2                    | 1.22                        | 14                    | 522                           | 844                                    | 0.017 | 37.29  | 0.62   | 1.000 | 0.99999 |
| 4324              | 2                    | 1.69                        | 1,254                 | 84,214                        | 1,257                                  | 0.998 | 67.16  | 67.00  | 1.001 | 0.99850 |
| 4341              | 3                    | 5.01                        | 29                    | 1,528                         | 1,799                                  | 0.016 | 52.69  | 0.85   | 1.036 | 0.99998 |
| 4342              | 5                    | 9.19                        | 5                     | 551                           | 1,758                                  | 0.003 | 110.20 | 0.31   | 1.000 | 0.99999 |
| 4343              | 1                    | 0.82                        | 61                    | 3,011                         | 1,026                                  | 0.059 | 49.36  | 2.93   | 1.000 | 0.99993 |
| 4361              | 1                    | 0.25                        | 1                     | 15                            | 1,282                                  | 0.001 | 15.00  | 0.01   | 1.000 | 0.99999 |
| 4362              | 4                    | 1.46                        | 4                     | 88                            | 828                                    | 0.005 | 22.00  | 0.11   | 1.000 | 0.99999 |
| 4363              | 7                    | 4.46                        | 23                    | 1,997                         | 1,695                                  | 0.014 | 86.83  | 1.18   | 1.045 | 0.99997 |
| 4371              | 6                    | 8.46                        | 1,647                 | 234,504                       | 1,544                                  | 1.067 | 142.38 | 151.88 | 1.068 | 0.99660 |
| 4372              | 9                    | 21.79                       | 506                   | 68,945                        | 440                                    | 1.150 | 136.25 | 156.69 | 1.150 | 0.99649 |
| 4373              | 1                    | 2.43                        | 777                   | 113,843                       | 778                                    | 0.999 | 146.52 | 146.33 | 1.000 | 0.99672 |
| 4386              | 1                    | 3.72                        | 7                     | 1,563                         | 1,658                                  | 0.004 | 223.29 | 0.94   | 1.000 | 0.99998 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 4431              | 4                    | 4.96                        | 5                     | 342                           | 1,387                                  | 0.004 | 68.40  | 0.25   | 1.000 | 0.99999 |
| 4432              | 1                    | 0.38                        | 1                     | 23                            | 462                                    | 0.002 | 23.00  | 0.05   | 1.000 | 0.99999 |
| 4511              | 3                    | 5.50                        | 93                    | 9,526                         | 1,132                                  | 0.082 | 102.43 | 8.42   | 1.000 | 0.99981 |
| 4512              | 1                    | 1.82                        | 1                     | 109                           | 1,016                                  | 0.001 | 109.00 | 0.11   | 1.000 | 0.99999 |
| 4601              | 1                    | 1.62                        | 7                     | 682                           | 416                                    | 0.017 | 97.43  | 1.64   | 1.000 | 0.99996 |
| 4692              | 3                    | 6.77                        | 13                    | 2,182                         | 470                                    | 0.028 | 167.85 | 4.64   | 1.083 | 0.99990 |
| 4714              | 2                    | 8.84                        | 26                    | 10,939                        | 328                                    | 0.079 | 420.73 | 33.35  | 1.040 | 0.99925 |
| 5601              | 9                    | 12.91                       | 120                   | 29,088                        | 1,168                                  | 0.103 | 242.40 | 24.90  | 1.008 | 0.99944 |
| 5602              | 2                    | 1.83                        | 2                     | 110                           | 681                                    | 0.003 | 55.00  | 0.16   | 1.000 | 0.99999 |
| 5603              | 4                    | 3.67                        | 132                   | 4,915                         | 1,290                                  | 0.102 | 37.23  | 3.81   | 1.650 | 0.99991 |
| 5901              | 3                    | 5.37                        | 1,487                 | 214,517                       | 680                                    | 2.187 | 144.26 | 315.47 | 2.193 | 0.99293 |
| 5902              | 5                    | 7.62                        | 2,107                 | 205,602                       | 1,012                                  | 2.082 | 97.58  | 203.16 | 2.082 | 0.99545 |
| 5903              | 3                    | 5.46                        | 529                   | 69,215                        | 256                                    | 2.066 | 130.84 | 270.37 | 2.066 | 0.99394 |
| 5904              | 3                    | 4.17                        | 2,447                 | 233,448                       | 1,223                                  | 2.001 | 95.40  | 190.88 | 2.001 | 0.99572 |
| 5905              | 7                    | 6.52                        | 3,826                 | 355,747                       | 1,876                                  | 2.039 | 92.98  | 189.63 | 2.039 | 0.99575 |
| 6141              | 1                    | 3.02                        | 1                     | 181                           | 634                                    | 0.002 | 181.00 | 0.29   | 1.000 | 0.99999 |
| 6143              | 2                    | 2.78                        | 76                    | 3,077                         | 372                                    | 0.204 | 40.49  | 8.27   | 1.013 | 0.99981 |
|                   | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL<br>CUSTOMERS<br>SERVED           | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
| Total:            | 334                  | 501.37                      | 29,112                | 3,071,708                     | 164,392                                | 0.177 | 105.51 | 18.69  | 1.492 | 0.99958 |



**THE EMPIRE DISTRICT ELECTRIC COMPANY**  
**CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI**  
8/1/2017 to 8/31/2017  
INCLUDING MAJOR EVENT DAYS

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 1082              | 6                    | 9.44                        | 13                    | 1,659                         | 1,340                                  | 0.010 | 127.62 | 1.24  | 1.300 | 0.99997 |
| 1084              | 1                    | 0.80                        | 1                     | 48                            | 5                                      | 0.200 | 48.00  | 9.60  | 1.000 | 0.99978 |
| 1091              | 3                    | 3.10                        | 3                     | 186                           | 694                                    | 0.004 | 62.00  | 0.27  | 1.000 | 0.99999 |
| 1092              | 3                    | 5.65                        | 3                     | 339                           | 972                                    | 0.003 | 113.00 | 0.35  | 1.000 | 0.99999 |
| 1094              | 5                    | 3.75                        | 12                    | 512                           | 1,232                                  | 0.010 | 42.67  | 0.42  | 1.000 | 0.99999 |
| 1102              | 2                    | 1.70                        | 2                     | 102                           | 470                                    | 0.004 | 51.00  | 0.22  | 1.000 | 0.99999 |
| 1142              | 2                    | 1.47                        | 5                     | 254                           | 214                                    | 0.023 | 50.80  | 1.19  | 1.250 | 0.99997 |
| 1211              | 3                    | 5.53                        | 83                    | 5,286                         | 1,480                                  | 0.056 | 63.69  | 3.57  | 1.012 | 0.99992 |
| 1232              | 1                    | 1.12                        | 5                     | 339                           | 1,184                                  | 0.004 | 67.80  | 0.29  | 1.000 | 0.99999 |
| 1263              | 1                    | 1.83                        | 1                     | 110                           | 1,141                                  | 0.001 | 110.00 | 0.10  | 1.000 | 0.99999 |
| 1271              | 1                    | 2.17                        | 2                     | 260                           | 964                                    | 0.002 | 130.00 | 0.27  | 1.000 | 0.99999 |
| 1284              | 1                    | 0.88                        | 9                     | 484                           | 949                                    | 0.009 | 53.78  | 0.51  | 1.000 | 0.99999 |
| 1453              | 4                    | 4.00                        | 451                   | 10,051                        | 1,798                                  | 0.251 | 22.29  | 5.59  | 1.119 | 0.99987 |
| 1454              | 2                    | 1.88                        | 2                     | 113                           | 935                                    | 0.002 | 56.50  | 0.12  | 1.000 | 0.99999 |
| 1521              | 2                    | 1.92                        | 8                     | 352                           | 365                                    | 0.022 | 44.00  | 0.96  | 1.000 | 0.99998 |
| 1843              | 2                    | 2.65                        | 2                     | 159                           | 1,079                                  | 0.002 | 79.50  | 0.15  | 1.000 | 0.99999 |
| 2052              | 1                    | 0.88                        | 1                     | 53                            | 85                                     | 0.012 | 53.00  | 0.62  | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 2091              | 6                    | 22.93                       | 193                   | 33,481                        | 882                                    | 0.219 | 173.48 | 37.96  | 1.060 | 0.99915 |
| 2171              | 2                    | 6.40                        | 1,128                 | 217,017                       | 564                                    | 2.000 | 192.39 | 384.78 | 2.000 | 0.99138 |
| 2172              | 2                    | 6.35                        | 446                   | 85,025                        | 223                                    | 2.000 | 190.64 | 381.28 | 2.000 | 0.99146 |
| 2211              | 2                    | 3.00                        | 2                     | 180                           | 723                                    | 0.003 | 90.00  | 0.25   | 1.000 | 0.99999 |
| 2212              | 5                    | 4.32                        | 14                    | 885                           | 1,294                                  | 0.011 | 63.21  | 0.68   | 1.000 | 0.99998 |
| 2511              | 1                    | 3.40                        | 1                     | 204                           | 619                                    | 0.002 | 204.00 | 0.33   | 1.000 | 0.99999 |
| 2621              | 3                    | 5.18                        | 14                    | 1,185                         | 1,170                                  | 0.012 | 84.64  | 1.01   | 1.077 | 0.99998 |
| 2951              | 5                    | 5.59                        | 16                    | 1,225                         | 1,401                                  | 0.011 | 76.56  | 0.87   | 1.000 | 0.99998 |
| 2961              | 1                    | 2.68                        | 18                    | 2,901                         | 648                                    | 0.028 | 161.17 | 4.48   | 1.000 | 0.99990 |
| 3123              | 2                    | 3.45                        | 2                     | 207                           | 1,055                                  | 0.002 | 103.50 | 0.20   | 1.000 | 0.99999 |
| 3181              | 2                    | 4.02                        | 66                    | 11,596                        | 727                                    | 0.091 | 175.70 | 15.95  | 1.015 | 0.99964 |
| 3221              | 1                    | 0.98                        | 1                     | 59                            | 1,245                                  | 0.001 | 59.00  | 0.05   | 1.000 | 0.99999 |
| 3222              | 1                    | 0.92                        | 652                   | 36,316                        | 773                                    | 0.843 | 55.70  | 46.98  | 1.000 | 0.99895 |
| 3231              | 1                    | 1.07                        | 1                     | 64                            | 203                                    | 0.005 | 64.00  | 0.32   | 1.000 | 0.99999 |
| 3232              | 2                    | 2.73                        | 26                    | 2,142                         | 427                                    | 0.061 | 82.38  | 5.02   | 1.182 | 0.99989 |
| 3302              | 1                    | 0.83                        | 1                     | 50                            | 902                                    | 0.001 | 50.00  | 0.06   | 1.000 | 0.99999 |
| 3314              | 1                    | 0.40                        | 20                    | 499                           | 222                                    | 0.090 | 24.95  | 2.25   | 1.000 | 0.99995 |
| 3315              | 3                    | 1.94                        | 66                    | 2,932                         | 1,580                                  | 0.042 | 44.42  | 1.86   | 1.015 | 0.99996 |
| 3472              | 4                    | 2.37                        | 16                    | 424                           | 1,582                                  | 0.010 | 26.50  | 0.27   | 1.000 | 0.99999 |
| 3551              | 1                    | 1.57                        | 37                    | 3,474                         | 1,031                                  | 0.036 | 93.89  | 3.37   | 1.000 | 0.99992 |
| 3553              | 1                    | 0.43                        | 34                    | 893                           | 1,044                                  | 0.033 | 26.26  | 0.86   | 1.000 | 0.99998 |
| 3591              | 2                    | 1.91                        | 27                    | 995                           | 1,223                                  | 0.022 | 36.85  | 0.81   | 1.038 | 0.99998 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 3592              | 2                    | 3.37                        | 53                    | 5,141                         | 1,708                                  | 0.031 | 97.00  | 3.01   | 1.000 | 0.99993 |
| 3621              | 3                    | 2.93                        | 4                     | 259                           | 1,555                                  | 0.003 | 64.75  | 0.17   | 1.000 | 0.99999 |
| 3661              | 3                    | 2.00                        | 57                    | 2,585                         | 1,028                                  | 0.055 | 45.35  | 2.51   | 1.000 | 0.99994 |
| 3662              | 1                    | 0.50                        | 8                     | 242                           | 783                                    | 0.010 | 30.25  | 0.31   | 1.000 | 0.99999 |
| 3663              | 1                    | 0.63                        | 2                     | 76                            | 737                                    | 0.003 | 38.00  | 0.10   | 1.000 | 0.99999 |
| 3664              | 2                    | 1.13                        | 2                     | 68                            | 549                                    | 0.004 | 34.00  | 0.12   | 1.000 | 0.99999 |
| 3673              | 1                    | 1.37                        | 1                     | 82                            | 268                                    | 0.004 | 82.00  | 0.31   | 1.000 | 0.99999 |
| 3692              | 2                    | 2.13                        | 32                    | 2,937                         | 410                                    | 0.078 | 91.78  | 7.16   | 1.000 | 0.99984 |
| 3751              | 5                    | 11.20                       | 890                   | 183,394                       | 885                                    | 1.006 | 206.06 | 207.22 | 1.013 | 0.99536 |
| 3871              | 1                    | 0.43                        | 1                     | 26                            | 1,453                                  | 0.001 | 26.00  | 0.02   | 1.000 | 0.99999 |
| 3872              | 2                    | 2.82                        | 37                    | 2,863                         | 1,067                                  | 0.035 | 77.38  | 2.68   | 1.000 | 0.99994 |
| 3873              | 5                    | 9.74                        | 821                   | 64,745                        | 798                                    | 1.029 | 78.86  | 81.13  | 1.271 | 0.99818 |
| 3878              | 1                    | 1.73                        | 13                    | 1,357                         | 796                                    | 0.016 | 104.38 | 1.70   | 1.000 | 0.99996 |
| 3892              | 3                    | 7.35                        | 780                   | 80,094                        | 2,275                                  | 0.343 | 102.68 | 35.21  | 1.223 | 0.99921 |
| 3893              | 5                    | 7.87                        | 7                     | 697                           | 1,115                                  | 0.006 | 99.57  | 0.63   | 1.167 | 0.99999 |
| 3901              | 2                    | 1.15                        | 84                    | 2,867                         | 878                                    | 0.096 | 34.13  | 3.27   | 1.000 | 0.99993 |
| 3913              | 1                    | 1.28                        | 112                   | 8,708                         | 819                                    | 0.137 | 77.75  | 10.63  | 1.000 | 0.99976 |
| 3951              | 4                    | 9.33                        | 54                    | 6,871                         | 930                                    | 0.058 | 127.24 | 7.39   | 1.000 | 0.99983 |
| 3952              | 2                    | 2.10                        | 1,288                 | 73,503                        | 1,273                                  | 1.012 | 57.07  | 57.74  | 1.011 | 0.99871 |
| 3953              | 2                    | 2.16                        | 4                     | 292                           | 524                                    | 0.008 | 73.00  | 0.56   | 1.000 | 0.99999 |
| 3981              | 4                    | 4.25                        | 4                     | 255                           | 1,503                                  | 0.003 | 63.75  | 0.17   | 1.000 | 0.99999 |
| 3991              | 1                    | 1.60                        | 1                     | 96                            | 730                                    | 0.001 | 96.00  | 0.13   | 1.000 | 0.99999 |

## CONFIDENTIAL 4 CSR 240-2.135(2)(A)4

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 4031              | 4                    | 5.16                        | 28                    | 1,711                         | 706                                    | 0.040 | 61.11  | 2.42   | 1.037 | 0.99995 |
| 4091              | 3                    | 4.87                        | 89                    | 6,955                         | 1,148                                  | 0.078 | 78.15  | 6.06   | 1.011 | 0.99986 |
| 4092              | 1                    | 0.58                        | 1                     | 35                            | 433                                    | 0.002 | 35.00  | 0.08   | 1.000 | 0.99999 |
| 4102              | 1                    | 2.08                        | 72                    | 9,034                         | 904                                    | 0.080 | 125.47 | 9.99   | 1.000 | 0.99978 |
| 4136              | 1                    | 0.75                        | 1                     | 45                            | 594                                    | 0.002 | 45.00  | 0.08   | 1.000 | 0.99999 |
| 4137              | 10                   | 37.04                       | 30                    | 7,596                         | 797                                    | 0.038 | 253.20 | 9.53   | 1.000 | 0.99979 |
| 4138              | 1                    | 0.67                        | 11                    | 440                           | 745                                    | 0.015 | 40.00  | 0.59   | 1.000 | 0.99999 |
| 4142              | 1                    | 0.80                        | 1                     | 48                            | 598                                    | 0.002 | 48.00  | 0.08   | 1.000 | 0.99999 |
| 4151              | 1                    | 1.17                        | 42                    | 2,920                         | 1,247                                  | 0.034 | 69.52  | 2.34   | 1.000 | 0.99995 |
| 4153              | 2                    | 2.15                        | 47                    | 3,243                         | 1,297                                  | 0.036 | 69.00  | 2.50   | 1.000 | 0.99994 |
| 4155              | 5                    | 5.02                        | 2,228                 | 107,426                       | 2,151                                  | 1.036 | 48.22  | 49.94  | 1.304 | 0.99888 |
| 4171              | 2                    | 1.25                        | 39                    | 778                           | 678                                    | 0.058 | 19.95  | 1.15   | 1.000 | 0.99997 |
| 4173              | 4                    | 12.04                       | 627                   | 69,503                        | 635                                    | 0.987 | 110.85 | 109.45 | 1.507 | 0.99755 |
| 4181              | 2                    | 3.24                        | 41                    | 3,628                         | 622                                    | 0.066 | 88.49  | 5.83   | 1.000 | 0.99987 |
| 4182              | 1                    | 2.42                        | 1                     | 145                           | 896                                    | 0.001 | 145.00 | 0.16   | 1.000 | 0.99999 |
| 4212              | 4                    | 13.74                       | 30                    | 14,328                        | 820                                    | 0.037 | 477.60 | 17.47  | 1.000 | 0.99961 |
| 4224              | 1                    | 1.08                        | 83                    | 5,458                         | 757                                    | 0.110 | 65.76  | 7.21   | 1.000 | 0.99984 |
| 4302              | 1                    | 2.77                        | 5                     | 830                           | 651                                    | 0.008 | 166.00 | 1.27   | 1.000 | 0.99997 |
| 4303              | 2                    | 9.74                        | 12                    | 4,923                         | 995                                    | 0.012 | 410.25 | 4.95   | 1.091 | 0.99989 |
| 4311              | 2                    | 2.37                        | 64                    | 4,581                         | 860                                    | 0.074 | 71.58  | 5.33   | 2.000 | 0.99988 |
| 4313              | 1                    | 0.32                        | 1                     | 19                            | 535                                    | 0.002 | 19.00  | 0.04   | 1.000 | 0.99999 |
| 4324              | 1                    | 0.47                        | 16                    | 457                           | 1,259                                  | 0.013 | 28.56  | 0.36   | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 4331              | 1                    | 2.48                        | 313                   | 46,720                        | 313                                    | 1.000 | 149.27 | 149.27 | 1.000 | 0.99666 |
| 4341              | 5                    | 7.51                        | 79                    | 6,860                         | 1,817                                  | 0.043 | 86.84  | 3.78   | 1.026 | 0.99992 |
| 4342              | 3                    | 2.32                        | 49                    | 2,526                         | 1,763                                  | 0.028 | 51.55  | 1.43   | 1.021 | 0.99997 |
| 4361              | 1                    | 1.03                        | 1                     | 62                            | 1,768                                  | 0.001 | 62.00  | 0.04   | 1.000 | 0.99999 |
| 4362              | 1                    | 1.77                        | 6                     | 638                           | 827                                    | 0.007 | 106.33 | 0.77   | 1.000 | 0.99998 |
| 4363              | 2                    | 1.56                        | 24                    | 1,233                         | 1,699                                  | 0.014 | 51.38  | 0.73   | 1.000 | 0.99998 |
| 4371              | 5                    | 23.17                       | 123                   | 45,166                        | 1,545                                  | 0.080 | 367.20 | 29.23  | 1.025 | 0.99935 |
| 4372              | 2                    | 2.44                        | 20                    | 1,801                         | 440                                    | 0.045 | 90.05  | 4.09   | 1.053 | 0.99991 |
| 4373              | 2                    | 2.67                        | 2                     | 160                           | 778                                    | 0.003 | 80.00  | 0.21   | 1.000 | 0.99999 |
| 4385              | 1                    | 1.03                        | 5                     | 310                           | 1,119                                  | 0.004 | 62.00  | 0.28   | 1.000 | 0.99999 |
| 4431              | 3                    | 2.60                        | 39                    | 1,398                         | 1,387                                  | 0.028 | 35.85  | 1.01   | 1.000 | 0.99998 |
| 4432              | 1                    | 0.93                        | 1                     | 56                            | 463                                    | 0.002 | 56.00  | 0.12   | 1.000 | 0.99999 |
| 4511              | 1                    | 0.55                        | 38                    | 1,275                         | 1,134                                  | 0.034 | 33.55  | 1.12   | 1.000 | 0.99997 |
| 4602              | 1                    | 1.80                        | 41                    | 4,430                         | 948                                    | 0.043 | 108.05 | 4.67   | 1.000 | 0.99990 |
| 4714              | 4                    | 6.51                        | 62                    | 7,857                         | 328                                    | 0.189 | 126.73 | 23.95  | 1.107 | 0.99946 |
| 5601              | 1                    | 1.07                        | 1                     | 64                            | 1,173                                  | 0.001 | 64.00  | 0.05   | 1.000 | 0.99999 |
| 5602              | 2                    | 4.32                        | 20                    | 3,150                         | 681                                    | 0.029 | 157.50 | 4.63   | 1.053 | 0.99990 |
| 5603              | 3                    | 5.37                        | 51                    | 7,163                         | 1,290                                  | 0.040 | 140.45 | 5.55   | 1.020 | 0.99988 |
| 5902              | 3                    | 2.99                        | 73                    | 4,624                         | 978                                    | 0.075 | 63.34  | 4.73   | 1.014 | 0.99989 |
| 5904              | 3                    | 3.12                        | 69                    | 4,330                         | 1,223                                  | 0.056 | 62.75  | 3.54   | 1.500 | 0.99992 |
| 5905              | 5                    | 7.68                        | 113                   | 13,166                        | 1,876                                  | 0.060 | 116.51 | 7.02   | 1.027 | 0.99984 |
| 6021              | 1                    | 1.52                        | 1                     | 91                            | 1,298                                  | 0.001 | 91.00  | 0.07   | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 6023              | 1                    | 1.33                        | 1                     | 80                            | 128                                    | 0.008 | 80.00  | 0.63  | 1.000 | 0.99999 |
| 6024              | 1                    | 0.52                        | 9                     | 283                           | 394                                    | 0.023 | 31.44  | 0.72  | 1.000 | 0.99998 |
| 6141              | 1                    | 0.55                        | 391                   | 13,111                        | 632                                    | 0.619 | 33.53  | 20.75 | 1.000 | 0.99954 |
| 6142              | 2                    | 5.70                        | 2                     | 342                           | 311                                    | 0.006 | 171.00 | 1.10  | 1.000 | 0.99998 |
|                   | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL<br>CUSTOMERS<br>SERVED           | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
| Total:            | 249                  | 410.58                      | 12,642                | 1,270,218                     | 165,550                                | 0.076 | 100.48 | 7.67  | 1.185 | 0.99983 |

**THE EMPIRE DISTRICT ELECTRIC COMPANY**  
**CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI**  
8/1/2017 to 8/31/2017  
EXCLUDING MAJOR EVENT DAYS

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 1082              | 6                    | 9.44                        | 13                    | 1,659                         | 1,340                                  | 0.010 | 127.62 | 1.24  | 1.300 | 0.99997 |
| 1084              | 1                    | 0.80                        | 1                     | 48                            | 5                                      | 0.200 | 48.00  | 9.60  | 1.000 | 0.99978 |
| 1091              | 3                    | 3.10                        | 3                     | 186                           | 694                                    | 0.004 | 62.00  | 0.27  | 1.000 | 0.99999 |
| 1092              | 3                    | 5.65                        | 3                     | 339                           | 972                                    | 0.003 | 113.00 | 0.35  | 1.000 | 0.99999 |
| 1094              | 5                    | 3.75                        | 12                    | 512                           | 1,232                                  | 0.010 | 42.67  | 0.42  | 1.000 | 0.99999 |
| 1102              | 2                    | 1.70                        | 2                     | 102                           | 470                                    | 0.004 | 51.00  | 0.22  | 1.000 | 0.99999 |
| 1142              | 2                    | 1.47                        | 5                     | 254                           | 214                                    | 0.023 | 50.80  | 1.19  | 1.250 | 0.99997 |
| 1211              | 3                    | 5.53                        | 83                    | 5,286                         | 1,480                                  | 0.056 | 63.69  | 3.57  | 1.012 | 0.99992 |
| 1232              | 1                    | 1.12                        | 5                     | 339                           | 1,184                                  | 0.004 | 67.80  | 0.29  | 1.000 | 0.99999 |
| 1263              | 1                    | 1.83                        | 1                     | 110                           | 1,141                                  | 0.001 | 110.00 | 0.10  | 1.000 | 0.99999 |
| 1271              | 1                    | 2.17                        | 2                     | 260                           | 964                                    | 0.002 | 130.00 | 0.27  | 1.000 | 0.99999 |
| 1284              | 1                    | 0.88                        | 9                     | 484                           | 949                                    | 0.009 | 53.78  | 0.51  | 1.000 | 0.99999 |
| 1453              | 4                    | 4.00                        | 451                   | 10,051                        | 1,798                                  | 0.251 | 22.29  | 5.59  | 1.119 | 0.99987 |
| 1454              | 2                    | 1.88                        | 2                     | 113                           | 935                                    | 0.002 | 56.50  | 0.12  | 1.000 | 0.99999 |
| 1521              | 2                    | 1.92                        | 8                     | 352                           | 365                                    | 0.022 | 44.00  | 0.96  | 1.000 | 0.99998 |
| 1843              | 2                    | 2.65                        | 2                     | 159                           | 1,079                                  | 0.002 | 79.50  | 0.15  | 1.000 | 0.99999 |
| 2052              | 1                    | 0.88                        | 1                     | 53                            | 85                                     | 0.012 | 53.00  | 0.62  | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 2091              | 6                    | 22.93                       | 193                   | 33,481                        | 882                                    | 0.219 | 173.48 | 37.96  | 1.060 | 0.99915 |
| 2171              | 2                    | 6.40                        | 1,128                 | 217,017                       | 564                                    | 2.000 | 192.39 | 384.78 | 2.000 | 0.99138 |
| 2172              | 2                    | 6.35                        | 446                   | 85,025                        | 223                                    | 2.000 | 190.64 | 381.28 | 2.000 | 0.99146 |
| 2211              | 2                    | 3.00                        | 2                     | 180                           | 723                                    | 0.003 | 90.00  | 0.25   | 1.000 | 0.99999 |
| 2212              | 5                    | 4.32                        | 14                    | 885                           | 1,294                                  | 0.011 | 63.21  | 0.68   | 1.000 | 0.99998 |
| 2511              | 1                    | 3.40                        | 1                     | 204                           | 619                                    | 0.002 | 204.00 | 0.33   | 1.000 | 0.99999 |
| 2621              | 3                    | 5.18                        | 14                    | 1,185                         | 1,170                                  | 0.012 | 84.64  | 1.01   | 1.077 | 0.99998 |
| 2951              | 5                    | 5.59                        | 16                    | 1,225                         | 1,401                                  | 0.011 | 76.56  | 0.87   | 1.000 | 0.99998 |
| 2961              | 1                    | 2.68                        | 18                    | 2,901                         | 648                                    | 0.028 | 161.17 | 4.48   | 1.000 | 0.99990 |
| 3123              | 2                    | 3.45                        | 2                     | 207                           | 1,055                                  | 0.002 | 103.50 | 0.20   | 1.000 | 0.99999 |
| 3181              | 2                    | 4.02                        | 66                    | 11,596                        | 727                                    | 0.091 | 175.70 | 15.95  | 1.015 | 0.99964 |
| 3221              | 1                    | 0.98                        | 1                     | 59                            | 1,245                                  | 0.001 | 59.00  | 0.05   | 1.000 | 0.99999 |
| 3222              | 1                    | 0.92                        | 652                   | 36,316                        | 773                                    | 0.843 | 55.70  | 46.98  | 1.000 | 0.99895 |
| 3231              | 1                    | 1.07                        | 1                     | 64                            | 203                                    | 0.005 | 64.00  | 0.32   | 1.000 | 0.99999 |
| 3232              | 2                    | 2.73                        | 26                    | 2,142                         | 427                                    | 0.061 | 82.38  | 5.02   | 1.182 | 0.99989 |
| 3302              | 1                    | 0.83                        | 1                     | 50                            | 902                                    | 0.001 | 50.00  | 0.06   | 1.000 | 0.99999 |
| 3314              | 1                    | 0.40                        | 20                    | 499                           | 222                                    | 0.090 | 24.95  | 2.25   | 1.000 | 0.99995 |
| 3315              | 3                    | 1.94                        | 66                    | 2,932                         | 1,580                                  | 0.042 | 44.42  | 1.86   | 1.015 | 0.99996 |
| 3472              | 4                    | 2.37                        | 16                    | 424                           | 1,582                                  | 0.010 | 26.50  | 0.27   | 1.000 | 0.99999 |
| 3551              | 1                    | 1.57                        | 37                    | 3,474                         | 1,031                                  | 0.036 | 93.89  | 3.37   | 1.000 | 0.99992 |
| 3553              | 1                    | 0.43                        | 34                    | 893                           | 1,044                                  | 0.033 | 26.26  | 0.86   | 1.000 | 0.99998 |
| 3591              | 2                    | 1.91                        | 27                    | 995                           | 1,223                                  | 0.022 | 36.85  | 0.81   | 1.038 | 0.99998 |



| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 3592              | 2                    | 3.37                        | 53                    | 5,141                         | 1,708                                  | 0.031 | 97.00  | 3.01   | 1.000 | 0.99993 |
| 3621              | 3                    | 2.93                        | 4                     | 259                           | 1,555                                  | 0.003 | 64.75  | 0.17   | 1.000 | 0.99999 |
| 3661              | 3                    | 2.00                        | 57                    | 2,585                         | 1,028                                  | 0.055 | 45.35  | 2.51   | 1.000 | 0.99994 |
| 3662              | 1                    | 0.50                        | 8                     | 242                           | 783                                    | 0.010 | 30.25  | 0.31   | 1.000 | 0.99999 |
| 3663              | 1                    | 0.63                        | 2                     | 76                            | 737                                    | 0.003 | 38.00  | 0.10   | 1.000 | 0.99999 |
| 3664              | 2                    | 1.13                        | 2                     | 68                            | 549                                    | 0.004 | 34.00  | 0.12   | 1.000 | 0.99999 |
| 3673              | 1                    | 1.37                        | 1                     | 82                            | 268                                    | 0.004 | 82.00  | 0.31   | 1.000 | 0.99999 |
| 3692              | 2                    | 2.13                        | 32                    | 2,937                         | 410                                    | 0.078 | 91.78  | 7.16   | 1.000 | 0.99984 |
| 3751              | 5                    | 11.20                       | 890                   | 183,394                       | 885                                    | 1.006 | 206.06 | 207.22 | 1.013 | 0.99536 |
| 3871              | 1                    | 0.43                        | 1                     | 26                            | 1,453                                  | 0.001 | 26.00  | 0.02   | 1.000 | 0.99999 |
| 3872              | 2                    | 2.82                        | 37                    | 2,863                         | 1,067                                  | 0.035 | 77.38  | 2.68   | 1.000 | 0.99994 |
| 3873              | 5                    | 9.74                        | 821                   | 64,745                        | 798                                    | 1.029 | 78.86  | 81.13  | 1.271 | 0.99818 |
| 3878              | 1                    | 1.73                        | 13                    | 1,357                         | 796                                    | 0.016 | 104.38 | 1.70   | 1.000 | 0.99996 |
| 3892              | 3                    | 7.35                        | 780                   | 80,094                        | 2,275                                  | 0.343 | 102.68 | 35.21  | 1.223 | 0.99921 |
| 3893              | 5                    | 7.87                        | 7                     | 697                           | 1,115                                  | 0.006 | 99.57  | 0.63   | 1.167 | 0.99999 |
| 3901              | 2                    | 1.15                        | 84                    | 2,867                         | 878                                    | 0.096 | 34.13  | 3.27   | 1.000 | 0.99993 |
| 3913              | 1                    | 1.28                        | 112                   | 8,708                         | 819                                    | 0.137 | 77.75  | 10.63  | 1.000 | 0.99976 |
| 3951              | 4                    | 9.33                        | 54                    | 6,871                         | 930                                    | 0.058 | 127.24 | 7.39   | 1.000 | 0.99983 |
| 3952              | 2                    | 2.10                        | 1,288                 | 73,503                        | 1,273                                  | 1.012 | 57.07  | 57.74  | 1.011 | 0.99871 |
| 3953              | 2                    | 2.16                        | 4                     | 292                           | 524                                    | 0.008 | 73.00  | 0.56   | 1.000 | 0.99999 |
| 3981              | 4                    | 4.25                        | 4                     | 255                           | 1,503                                  | 0.003 | 63.75  | 0.17   | 1.000 | 0.99999 |
| 3991              | 1                    | 1.60                        | 1                     | 96                            | 730                                    | 0.001 | 96.00  | 0.13   | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 4031              | 4                    | 5.16                        | 28                    | 1,711                         | 706                                    | 0.040 | 61.11  | 2.42   | 1.037 | 0.99995 |
| 4091              | 3                    | 4.87                        | 89                    | 6,955                         | 1,148                                  | 0.078 | 78.15  | 6.06   | 1.011 | 0.99986 |
| 4092              | 1                    | 0.58                        | 1                     | 35                            | 433                                    | 0.002 | 35.00  | 0.08   | 1.000 | 0.99999 |
| 4102              | 1                    | 2.08                        | 72                    | 9,034                         | 904                                    | 0.080 | 125.47 | 9.99   | 1.000 | 0.99978 |
| 4136              | 1                    | 0.75                        | 1                     | 45                            | 594                                    | 0.002 | 45.00  | 0.08   | 1.000 | 0.99999 |
| 4137              | 10                   | 37.04                       | 30                    | 7,596                         | 797                                    | 0.038 | 253.20 | 9.53   | 1.000 | 0.99979 |
| 4138              | 1                    | 0.67                        | 11                    | 440                           | 745                                    | 0.015 | 40.00  | 0.59   | 1.000 | 0.99999 |
| 4142              | 1                    | 0.80                        | 1                     | 48                            | 598                                    | 0.002 | 48.00  | 0.08   | 1.000 | 0.99999 |
| 4151              | 1                    | 1.17                        | 42                    | 2,920                         | 1,247                                  | 0.034 | 69.52  | 2.34   | 1.000 | 0.99995 |
| 4153              | 2                    | 2.15                        | 47                    | 3,243                         | 1,297                                  | 0.036 | 69.00  | 2.50   | 1.000 | 0.99994 |
| 4155              | 5                    | 5.02                        | 2,228                 | 107,426                       | 2,151                                  | 1.036 | 48.22  | 49.94  | 1.304 | 0.99888 |
| 4171              | 2                    | 1.25                        | 39                    | 778                           | 678                                    | 0.058 | 19.95  | 1.15   | 1.000 | 0.99997 |
| 4173              | 4                    | 12.04                       | 627                   | 69,503                        | 635                                    | 0.987 | 110.85 | 109.45 | 1.507 | 0.99755 |
| 4181              | 2                    | 3.24                        | 41                    | 3,628                         | 622                                    | 0.066 | 88.49  | 5.83   | 1.000 | 0.99987 |
| 4182              | 1                    | 2.42                        | 1                     | 145                           | 896                                    | 0.001 | 145.00 | 0.16   | 1.000 | 0.99999 |
| 4212              | 4                    | 13.74                       | 30                    | 14,328                        | 820                                    | 0.037 | 477.60 | 17.47  | 1.000 | 0.99961 |
| 4224              | 1                    | 1.08                        | 83                    | 5,458                         | 757                                    | 0.110 | 65.76  | 7.21   | 1.000 | 0.99984 |
| 4302              | 1                    | 2.77                        | 5                     | 830                           | 651                                    | 0.008 | 166.00 | 1.27   | 1.000 | 0.99997 |
| 4303              | 2                    | 9.74                        | 12                    | 4,923                         | 995                                    | 0.012 | 410.25 | 4.95   | 1.091 | 0.99989 |
| 4311              | 2                    | 2.37                        | 64                    | 4,581                         | 860                                    | 0.074 | 71.58  | 5.33   | 2.000 | 0.99988 |
| 4313              | 1                    | 0.32                        | 1                     | 19                            | 535                                    | 0.002 | 19.00  | 0.04   | 1.000 | 0.99999 |
| 4324              | 1                    | 0.47                        | 16                    | 457                           | 1,259                                  | 0.013 | 28.56  | 0.36   | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 4331              | 1                    | 2.48                        | 313                   | 46,720                        | 313                                    | 1.000 | 149.27 | 149.27 | 1.000 | 0.99666 |
| 4341              | 5                    | 7.51                        | 79                    | 6,860                         | 1,817                                  | 0.043 | 86.84  | 3.78   | 1.026 | 0.99992 |
| 4342              | 3                    | 2.32                        | 49                    | 2,526                         | 1,763                                  | 0.028 | 51.55  | 1.43   | 1.021 | 0.99997 |
| 4361              | 1                    | 1.03                        | 1                     | 62                            | 1,768                                  | 0.001 | 62.00  | 0.04   | 1.000 | 0.99999 |
| 4362              | 1                    | 1.77                        | 6                     | 638                           | 827                                    | 0.007 | 106.33 | 0.77   | 1.000 | 0.99998 |
| 4363              | 2                    | 1.56                        | 24                    | 1,233                         | 1,699                                  | 0.014 | 51.38  | 0.73   | 1.000 | 0.99998 |
| 4371              | 5                    | 23.17                       | 123                   | 45,166                        | 1,545                                  | 0.080 | 367.20 | 29.23  | 1.025 | 0.99935 |
| 4372              | 2                    | 2.44                        | 20                    | 1,801                         | 440                                    | 0.045 | 90.05  | 4.09   | 1.053 | 0.99991 |
| 4373              | 2                    | 2.67                        | 2                     | 160                           | 778                                    | 0.003 | 80.00  | 0.21   | 1.000 | 0.99999 |
| 4385              | 1                    | 1.03                        | 5                     | 310                           | 1,119                                  | 0.004 | 62.00  | 0.28   | 1.000 | 0.99999 |
| 4431              | 3                    | 2.60                        | 39                    | 1,398                         | 1,387                                  | 0.028 | 35.85  | 1.01   | 1.000 | 0.99998 |
| 4432              | 1                    | 0.93                        | 1                     | 56                            | 463                                    | 0.002 | 56.00  | 0.12   | 1.000 | 0.99999 |
| 4511              | 1                    | 0.55                        | 38                    | 1,275                         | 1,134                                  | 0.034 | 33.55  | 1.12   | 1.000 | 0.99997 |
| 4602              | 1                    | 1.80                        | 41                    | 4,430                         | 948                                    | 0.043 | 108.05 | 4.67   | 1.000 | 0.99990 |
| 4714              | 4                    | 6.51                        | 62                    | 7,857                         | 328                                    | 0.189 | 126.73 | 23.95  | 1.107 | 0.99946 |
| 5601              | 1                    | 1.07                        | 1                     | 64                            | 1,173                                  | 0.001 | 64.00  | 0.05   | 1.000 | 0.99999 |
| 5602              | 2                    | 4.32                        | 20                    | 3,150                         | 681                                    | 0.029 | 157.50 | 4.63   | 1.053 | 0.99990 |
| 5603              | 3                    | 5.37                        | 51                    | 7,163                         | 1,290                                  | 0.040 | 140.45 | 5.55   | 1.020 | 0.99988 |
| 5902              | 3                    | 2.99                        | 73                    | 4,624                         | 978                                    | 0.075 | 63.34  | 4.73   | 1.014 | 0.99989 |
| 5904              | 3                    | 3.12                        | 69                    | 4,330                         | 1,223                                  | 0.056 | 62.75  | 3.54   | 1.500 | 0.99992 |
| 5905              | 5                    | 7.68                        | 113                   | 13,166                        | 1,876                                  | 0.060 | 116.51 | 7.02   | 1.027 | 0.99984 |
| 6021              | 1                    | 1.52                        | 1                     | 91                            | 1,298                                  | 0.001 | 91.00  | 0.07   | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 6023              | 1                    | 1.33                        | 1                     | 80                            | 128                                    | 0.008 | 80.00  | 0.63  | 1.000 | 0.99999 |
| 6024              | 1                    | 0.52                        | 9                     | 283                           | 394                                    | 0.023 | 31.44  | 0.72  | 1.000 | 0.99998 |
| 6141              | 1                    | 0.55                        | 391                   | 13,111                        | 632                                    | 0.619 | 33.53  | 20.75 | 1.000 | 0.99954 |
| 6142              | 2                    | 5.70                        | 2                     | 342                           | 311                                    | 0.006 | 171.00 | 1.10  | 1.000 | 0.99998 |
|                   | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL<br>CUSTOMERS<br>SERVED           | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
| Total:            | 249                  | 410.58                      | 12,642                | 1,270,218                     | 165,550                                | 0.076 | 100.48 | 7.67  | 1.185 | 0.99983 |

**THE EMPIRE DISTRICT ELECTRIC COMPANY**  
**CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI**  
 9/1/2017 to 9/30/2017  
 INCLUDING MAJOR EVENT DAYS

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 1050              | 1                    | 0.43                        | 49                    | 1,318                         | 1,606                                  | 0.031 | 26.90  | 0.82  | 1.000 | 0.99998 |
| 1052              | 2                    | 1.53                        | 2                     | 92                            | 1,131                                  | 0.002 | 46.00  | 0.08  | 1.000 | 0.99999 |
| 1082              | 4                    | 5.90                        | 26                    | 3,058                         | 1,340                                  | 0.019 | 117.62 | 2.28  | 1.000 | 0.99995 |
| 1091              | 1                    | 1.68                        | 8                     | 815                           | 694                                    | 0.012 | 101.88 | 1.17  | 1.000 | 0.99997 |
| 1092              | 5                    | 4.01                        | 944                   | 7,947                         | 972                                    | 0.971 | 8.42   | 8.18  | 1.049 | 0.99981 |
| 1094              | 4                    | 2.78                        | 41                    | 1,610                         | 1,232                                  | 0.033 | 39.27  | 1.31  | 1.000 | 0.99997 |
| 1102              | 1                    | 0.23                        | 470                   | 7,034                         | 470                                    | 1.000 | 14.97  | 14.97 | 1.000 | 0.99965 |
| 1141              | 3                    | 2.51                        | 57                    | 2,875                         | 902                                    | 0.063 | 50.44  | 3.19  | 1.163 | 0.99993 |
| 1142              | 2                    | 2.65                        | 30                    | 2,403                         | 214                                    | 0.140 | 80.10  | 11.23 | 1.000 | 0.99974 |
| 1211              | 1                    | 1.03                        | 1                     | 62                            | 1,480                                  | 0.001 | 62.00  | 0.04  | 1.000 | 0.99999 |
| 1212              | 1                    | 1.63                        | 1                     | 98                            | 332                                    | 0.003 | 98.00  | 0.30  | 1.000 | 0.99999 |
| 1213              | 1                    | 1.68                        | 1                     | 101                           | 555                                    | 0.002 | 101.00 | 0.18  | 1.000 | 0.99999 |
| 1230              | 1                    | 1.32                        | 17                    | 1,347                         | 1,177                                  | 0.014 | 79.24  | 1.14  | 1.000 | 0.99997 |
| 1232              | 4                    | 5.57                        | 46                    | 3,501                         | 1,184                                  | 0.039 | 76.11  | 2.96  | 1.000 | 0.99993 |
| 1233              | 1                    | 0.92                        | 1                     | 55                            | 640                                    | 0.002 | 55.00  | 0.09  | 1.000 | 0.99999 |
| 1241              | 2                    | 2.31                        | 23                    | 1,652                         | 854                                    | 0.027 | 71.83  | 1.93  | 1.000 | 0.99996 |
| 1243              | 1                    | 1.30                        | 1                     | 78                            | 1,208                                  | 0.001 | 78.00  | 0.06  | 1.000 | 0.99999 |

## CONFIDENTIAL 4 CSR 240-2.135(2)(A)4

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 1261              | 2                    | 3.17                        | 399                   | 12,352                        | 398                                    | 1.003 | 30.96  | 31.04  | 1.003 | 0.99928 |
| 1263              | 1                    | 0.50                        | 1,141                 | 35,142                        | 1,141                                  | 1.000 | 30.80  | 30.80  | 1.000 | 0.99929 |
| 1264              | 1                    | 0.47                        | 174                   | 5,034                         | 18                                     | 9.667 | 28.93  | 279.67 | 1.000 | 0.99353 |
| 1265              | 4                    | 4.57                        | 1,294                 | 39,887                        | 1,283                                  | 1.009 | 30.82  | 31.09  | 1.009 | 0.99928 |
| 1267              | 1                    | 0.50                        | 82                    | 2,464                         | 82                                     | 1.000 | 30.05  | 30.05  | 1.000 | 0.99930 |
| 1273              | 1                    | 2.48                        | 7                     | 1,045                         | 865                                    | 0.008 | 149.29 | 1.21   | 1.000 | 0.99997 |
| 1274              | 1                    | 1.07                        | 1                     | 64                            | 4                                      | 0.250 | 64.00  | 16.00  | 1.000 | 0.99963 |
| 1282              | 1                    | 0.60                        | 33                    | 1,189                         | 694                                    | 0.048 | 36.03  | 1.71   | 1.000 | 0.99996 |
| 1311              | 1                    | 3.67                        | 1                     | 220                           | 273                                    | 0.004 | 220.00 | 0.81   | 1.000 | 0.99998 |
| 1453              | 2                    | 6.57                        | 43                    | 13,926                        | 1,798                                  | 0.024 | 323.86 | 7.75   | 1.000 | 0.99982 |
| 1454              | 2                    | 2.39                        | 156                   | 11,924                        | 935                                    | 0.167 | 76.44  | 12.75  | 1.000 | 0.99970 |
| 1521              | 1                    | 0.92                        | 1                     | 55                            | 365                                    | 0.003 | 55.00  | 0.15   | 1.000 | 0.99999 |
| 1841              | 2                    | 1.51                        | 2                     | 91                            | 652                                    | 0.003 | 45.50  | 0.14   | 1.000 | 0.99999 |
| 1843              | 1                    | 0.65                        | 1                     | 39                            | 1,079                                  | 0.001 | 39.00  | 0.04   | 1.000 | 0.99999 |
| 2091              | 2                    | 3.56                        | 887                   | 66,292                        | 882                                    | 1.006 | 74.74  | 75.16  | 1.006 | 0.99826 |
| 2092              | 2                    | 4.32                        | 2                     | 259                           | 919                                    | 0.002 | 129.50 | 0.28   | 1.000 | 0.99999 |
| 2171              | 1                    | 1.07                        | 1                     | 64                            | 564                                    | 0.002 | 64.00  | 0.11   | 1.000 | 0.99999 |
| 2172              | 1                    | 1.50                        | 1                     | 90                            | 223                                    | 0.004 | 90.00  | 0.40   | 1.000 | 0.99999 |
| 2211              | 2                    | 0.74                        | 2                     | 44                            | 723                                    | 0.003 | 22.00  | 0.06   | 1.000 | 0.99999 |
| 2212              | 3                    | 3.19                        | 4                     | 219                           | 1,294                                  | 0.003 | 54.75  | 0.17   | 1.000 | 0.99999 |
| 2621              | 3                    | 4.92                        | 41                    | 2,982                         | 1,170                                  | 0.035 | 72.73  | 2.55   | 1.025 | 0.99994 |
| 2921              | 2                    | 3.13                        | 380                   | 28,767                        | 375                                    | 1.013 | 75.70  | 76.71  | 1.013 | 0.99822 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 2951              | 2                    | 2.02                        | 30                    | 1,573                         | 1,401                                  | 0.021 | 52.43  | 1.12   | 1.034 | 0.99997 |
| 2961              | 2                    | 2.80                        | 8                     | 640                           | 648                                    | 0.012 | 80.00  | 0.99   | 1.000 | 0.99998 |
| 3121              | 2                    | 2.18                        | 27                    | 2,034                         | 1,132                                  | 0.024 | 75.33  | 1.80   | 1.000 | 0.99996 |
| 3122              | 2                    | 5.35                        | 44                    | 2,300                         | 851                                    | 0.052 | 52.27  | 2.70   | 1.000 | 0.99994 |
| 3181              | 1                    | 3.37                        | 4                     | 808                           | 726                                    | 0.006 | 202.00 | 1.11   | 1.000 | 0.99997 |
| 3221              | 3                    | 3.57                        | 62                    | 4,173                         | 1,245                                  | 0.050 | 67.31  | 3.35   | 1.000 | 0.99992 |
| 3222              | 1                    | 1.10                        | 1                     | 66                            | 773                                    | 0.001 | 66.00  | 0.09   | 1.000 | 0.99999 |
| 3232              | 1                    | 1.38                        | 12                    | 1,001                         | 427                                    | 0.028 | 83.42  | 2.34   | 1.000 | 0.99995 |
| 3311              | 1                    | 1.58                        | 1                     | 95                            | 536                                    | 0.002 | 95.00  | 0.18   | 1.000 | 0.99999 |
| 3314              | 1                    | 2.62                        | 9                     | 1,421                         | 222                                    | 0.041 | 157.89 | 6.40   | 1.000 | 0.99985 |
| 3315              | 1                    | 0.47                        | 1                     | 28                            | 1,580                                  | 0.001 | 28.00  | 0.02   | 1.000 | 0.99999 |
| 3422              | 2                    | 2.75                        | 22                    | 1,222                         | 975                                    | 0.023 | 55.55  | 1.25   | 1.000 | 0.99997 |
| 3472              | 7                    | 6.57                        | 280                   | 5,358                         | 1,582                                  | 0.177 | 19.14  | 3.39   | 1.045 | 0.99992 |
| 3551              | 2                    | 2.00                        | 66                    | 1,451                         | 1,031                                  | 0.064 | 21.98  | 1.41   | 1.000 | 0.99997 |
| 3552              | 2                    | 1.27                        | 22                    | 696                           | 576                                    | 0.038 | 31.64  | 1.21   | 1.048 | 0.99997 |
| 3553              | 1                    | 1.02                        | 1                     | 61                            | 1,042                                  | 0.001 | 61.00  | 0.06   | 1.000 | 0.99999 |
| 3591              | 2                    | 2.78                        | 18                    | 1,570                         | 1,223                                  | 0.015 | 87.22  | 1.28   | 1.000 | 0.99997 |
| 3592              | 5                    | 5.14                        | 5                     | 309                           | 1,708                                  | 0.003 | 61.80  | 0.18   | 1.250 | 0.99999 |
| 3593              | 1                    | 1.08                        | 1                     | 65                            | 929                                    | 0.001 | 65.00  | 0.07   | 1.000 | 0.99999 |
| 3594              | 2                    | 1.67                        | 2                     | 100                           | 723                                    | 0.003 | 50.00  | 0.14   | 1.000 | 0.99999 |
| 3621              | 2                    | 2.95                        | 3,108                 | 275,498                       | 1,555                                  | 1.999 | 88.64  | 177.17 | 2.000 | 0.99590 |
| 3661              | 2                    | 1.35                        | 48                    | 2,076                         | 1,029                                  | 0.047 | 43.25  | 2.02   | 1.000 | 0.99995 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 3662              | 3                    | 1.37                        | 3                     | 82                            | 783                                    | 0.004 | 27.33  | 0.10  | 1.000 | 0.99999 |
| 3664              | 1                    | 1.20                        | 1                     | 72                            | 549                                    | 0.002 | 72.00  | 0.13  | 1.000 | 0.99999 |
| 3671              | 1                    | 3.85                        | 1                     | 231                           | 503                                    | 0.002 | 231.00 | 0.46  | 1.000 | 0.99999 |
| 3673              | 1                    | 0.12                        | 61                    | 457                           | 268                                    | 0.228 | 7.49   | 1.71  | 1.000 | 0.99996 |
| 3692              | 1                    | 1.50                        | 1                     | 90                            | 410                                    | 0.002 | 90.00  | 0.22  | 1.000 | 0.99999 |
| 3694              | 3                    | 3.77                        | 7                     | 409                           | 1,330                                  | 0.005 | 58.43  | 0.31  | 1.167 | 0.99999 |
| 3701              | 2                    | 1.20                        | 5                     | 162                           | 493                                    | 0.010 | 32.40  | 0.33  | 1.000 | 0.99999 |
| 3702              | 1                    | 0.95                        | 1                     | 57                            | 611                                    | 0.002 | 57.00  | 0.09  | 1.000 | 0.99999 |
| 3751              | 1                    | 1.08                        | 1                     | 65                            | 885                                    | 0.001 | 65.00  | 0.07  | 1.000 | 0.99999 |
| 3871              | 3                    | 2.54                        | 31                    | 1,699                         | 1,453                                  | 0.021 | 54.81  | 1.17  | 1.000 | 0.99997 |
| 3872              | 1                    | 0.80                        | 26                    | 1,263                         | 1,067                                  | 0.024 | 48.58  | 1.18  | 1.000 | 0.99997 |
| 3878              | 3                    | 2.60                        | 799                   | 11,848                        | 796                                    | 1.004 | 14.83  | 14.88 | 1.013 | 0.99966 |
| 3891              | 2                    | 1.58                        | 2                     | 95                            | 457                                    | 0.004 | 47.50  | 0.21  | 1.000 | 0.99999 |
| 3892              | 2                    | 1.84                        | 544                   | 50,407                        | 1,390                                  | 0.391 | 92.66  | 36.26 | 1.006 | 0.99916 |
| 3893              | 2                    | 2.45                        | 4                     | 339                           | 1,115                                  | 0.004 | 84.75  | 0.30  | 1.000 | 0.99999 |
| 3901              | 2                    | 2.05                        | 10                    | 832                           | 878                                    | 0.011 | 83.20  | 0.95  | 1.000 | 0.99998 |
| 3903              | 3                    | 3.89                        | 56                    | 4,312                         | 299                                    | 0.187 | 77.00  | 14.42 | 1.000 | 0.99967 |
| 3912              | 2                    | 12.27                       | 18                    | 6,629                         | 1,164                                  | 0.015 | 368.28 | 5.70  | 1.125 | 0.99987 |
| 3951              | 7                    | 13.83                       | 95                    | 7,706                         | 930                                    | 0.102 | 81.12  | 8.29  | 1.011 | 0.99981 |
| 3952              | 4                    | 3.86                        | 71                    | 5,790                         | 1,273                                  | 0.056 | 81.55  | 4.55  | 1.014 | 0.99989 |
| 3971              | 2                    | 2.95                        | 18                    | 1,436                         | 665                                    | 0.027 | 79.78  | 2.16  | 1.059 | 0.99995 |
| 3981              | 2                    | 1.26                        | 6                     | 241                           | 1,503                                  | 0.004 | 40.17  | 0.16  | 1.000 | 0.99999 |



| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 3991              | 2                    | 1.87                        | 50                    | 2,711                         | 730                                    | 0.068 | 54.22  | 3.71  | 1.000 | 0.99991 |
| 3992              | 1                    | 1.32                        | 22                    | 1,742                         | 166                                    | 0.133 | 79.18  | 10.49 | 1.000 | 0.99976 |
| 4031              | 2                    | 5.85                        | 78                    | 5,097                         | 706                                    | 0.110 | 65.35  | 7.22  | 1.013 | 0.99983 |
| 4101              | 3                    | 5.88                        | 72                    | 9,512                         | 592                                    | 0.122 | 132.11 | 16.07 | 1.014 | 0.99963 |
| 4102              | 5                    | 8.28                        | 77                    | 9,789                         | 904                                    | 0.085 | 127.13 | 10.83 | 1.041 | 0.99975 |
| 4133              | 1                    | 1.55                        | 26                    | 2,435                         | 642                                    | 0.040 | 93.65  | 3.79  | 1.000 | 0.99991 |
| 4134              | 3                    | 3.38                        | 3                     | 203                           | 836                                    | 0.004 | 67.67  | 0.24  | 1.000 | 0.99999 |
| 4137              | 8                    | 6.60                        | 40                    | 2,136                         | 797                                    | 0.050 | 53.40  | 2.68  | 1.000 | 0.99994 |
| 4138              | 1                    | 0.50                        | 11                    | 340                           | 745                                    | 0.015 | 30.91  | 0.46  | 1.000 | 0.99999 |
| 4142              | 1                    | 0.85                        | 37                    | 1,895                         | 598                                    | 0.062 | 51.22  | 3.17  | 1.000 | 0.99993 |
| 4151              | 4                    | 3.18                        | 140                   | 5,835                         | 710                                    | 0.197 | 41.68  | 8.22  | 1.772 | 0.99981 |
| 4153              | 2                    | 1.83                        | 68                    | 3,774                         | 1,297                                  | 0.052 | 55.50  | 2.91  | 1.000 | 0.99993 |
| 4154              | 1                    | 1.62                        | 14                    | 1,369                         | 1,218                                  | 0.011 | 97.79  | 1.12  | 1.000 | 0.99997 |
| 4155              | 11                   | 18.64                       | 130                   | 13,080                        | 2,151                                  | 0.060 | 100.62 | 6.08  | 1.226 | 0.99986 |
| 4171              | 4                    | 3.16                        | 41                    | 523                           | 678                                    | 0.060 | 12.76  | 0.77  | 1.000 | 0.99998 |
| 4172              | 4                    | 3.19                        | 83                    | 5,348                         | 1,725                                  | 0.048 | 64.43  | 3.10  | 1.092 | 0.99993 |
| 4181              | 1                    | 1.02                        | 1                     | 61                            | 622                                    | 0.002 | 61.00  | 0.10  | 1.000 | 0.99999 |
| 4182              | 2                    | 7.52                        | 27                    | 2,637                         | 896                                    | 0.030 | 97.67  | 2.94  | 1.000 | 0.99993 |
| 4212              | 3                    | 10.33                       | 11                    | 916                           | 820                                    | 0.013 | 83.27  | 1.12  | 1.000 | 0.99997 |
| 4302              | 2                    | 2.45                        | 2                     | 147                           | 651                                    | 0.003 | 73.50  | 0.23  | 1.000 | 0.99999 |
| 4303              | 1                    | 4.72                        | 6                     | 1,701                         | 995                                    | 0.006 | 283.50 | 1.71  | 1.000 | 0.99996 |
| 4311              | 2                    | 1.28                        | 861                   | 51,245                        | 858                                    | 1.003 | 59.52  | 59.73 | 1.001 | 0.99862 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 4312              | 1                    | 0.83                        | 1                     | 50                            | 844                                    | 0.001 | 50.00  | 0.06  | 1.000 | 0.99999 |
| 4333              | 1                    | 0.47                        | 1                     | 28                            | 684                                    | 0.001 | 28.00  | 0.04  | 1.000 | 0.99999 |
| 4341              | 6                    | 5.66                        | 35                    | 2,304                         | 1,817                                  | 0.019 | 65.83  | 1.27  | 1.029 | 0.99997 |
| 4343              | 3                    | 2.45                        | 27                    | 1,287                         | 1,028                                  | 0.026 | 47.67  | 1.25  | 1.080 | 0.99997 |
| 4361              | 2                    | 0.60                        | 2                     | 36                            | 1,768                                  | 0.001 | 18.00  | 0.02  | 1.000 | 0.99999 |
| 4362              | 1                    | 0.70                        | 1                     | 42                            | 827                                    | 0.001 | 42.00  | 0.05  | 1.000 | 0.99999 |
| 4363              | 2                    | 1.05                        | 2                     | 63                            | 1,699                                  | 0.001 | 31.50  | 0.04  | 1.000 | 0.99999 |
| 4371              | 4                    | 5.00                        | 18                    | 1,532                         | 1,545                                  | 0.012 | 85.11  | 0.99  | 1.059 | 0.99998 |
| 4373              | 1                    | 0.58                        | 1                     | 35                            | 776                                    | 0.001 | 35.00  | 0.05  | 1.000 | 0.99999 |
| 4385              | 2                    | 0.87                        | 152                   | 6,512                         | 1,119                                  | 0.136 | 42.84  | 5.82  | 1.007 | 0.99987 |
| 4386              | 1                    | 2.20                        | 1                     | 132                           | 1,662                                  | 0.001 | 132.00 | 0.08  | 1.000 | 0.99999 |
| 4431              | 4                    | 4.87                        | 4                     | 292                           | 1,387                                  | 0.003 | 73.00  | 0.21  | 1.000 | 0.99999 |
| 4475              | 1                    | 0.45                        | 1                     | 27                            | 14                                     | 0.071 | 27.00  | 1.93  | 1.000 | 0.99996 |
| 4476              | 4                    | 1.24                        | 4                     | 74                            | 32                                     | 0.125 | 18.50  | 2.31  | 1.000 | 0.99995 |
| 4511              | 1                    | 1.85                        | 9                     | 1,000                         | 1,134                                  | 0.008 | 111.11 | 0.88  | 1.000 | 0.99998 |
| 455               | 1                    | 1.00                        | 1                     | 60                            | 168                                    | 0.006 | 60.00  | 0.36  | 1.000 | 0.99999 |
| 457               | 1                    | 0.90                        | 1                     | 54                            | 179                                    | 0.006 | 54.00  | 0.30  | 1.000 | 0.99999 |
| 4601              | 1                    | 1.22                        | 3                     | 219                           | 417                                    | 0.007 | 73.00  | 0.53  | 1.000 | 0.99999 |
| 4602              | 5                    | 4.19                        | 112                   | 6,066                         | 947                                    | 0.118 | 54.16  | 6.41  | 1.018 | 0.99985 |
| 4692              | 1                    | 1.27                        | 1                     | 76                            | 471                                    | 0.002 | 76.00  | 0.16  | 1.000 | 0.99999 |
| 4714              | 1                    | 2.12                        | 1                     | 127                           | 328                                    | 0.003 | 127.00 | 0.39  | 1.000 | 0.99999 |
| 5601              | 9                    | 9.33                        | 124                   | 5,278                         | 1,172                                  | 0.106 | 42.56  | 4.50  | 1.016 | 0.99990 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 5602              | 3                    | 3.58                        | 4                     | 330                           | 681                                    | 0.006 | 82.50  | 0.48  | 1.000 | 0.99999 |
| 5603              | 5                    | 4.87                        | 145                   | 7,601                         | 1,290                                  | 0.112 | 52.42  | 5.89  | 1.051 | 0.99986 |
| 5641              | 1                    | 2.08                        | 1                     | 125                           | 322                                    | 0.003 | 125.00 | 0.39  | 1.000 | 0.99999 |
| 5905              | 1                    | 0.73                        | 29                    | 1,287                         | 1,876                                  | 0.015 | 44.38  | 0.69  | 1.000 | 0.99998 |
| 6021              | 3                    | 2.58                        | 21                    | 1,273                         | 1,298                                  | 0.016 | 60.62  | 0.98  | 1.050 | 0.99998 |
| 6141              | 1                    | 1.58                        | 391                   | 37,399                        | 632                                    | 0.619 | 95.65  | 59.18 | 1.000 | 0.99863 |
|                   | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL<br>CUSTOMERS<br>SERVED           | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
| Total:            | 297                  | 370.25                      | 14,797                | 848,767                       | 164,060                                | 0.090 | 57.36  | 5.17  | 1.136 | 0.99988 |

**THE EMPIRE DISTRICT ELECTRIC COMPANY**  
**CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI**  
 9/1/2017 to 9/30/2017  
 EXCLUDING MAJOR EVENT DAYS

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 1050              | 1                    | 0.43                        | 49                    | 1,318                         | 1,606                                  | 0.031 | 26.90  | 0.82  | 1.000 | 0.99998 |
| 1052              | 2                    | 1.53                        | 2                     | 92                            | 1,131                                  | 0.002 | 46.00  | 0.08  | 1.000 | 0.99999 |
| 1082              | 4                    | 5.90                        | 26                    | 3,058                         | 1,340                                  | 0.019 | 117.62 | 2.28  | 1.000 | 0.99995 |
| 1091              | 1                    | 1.68                        | 8                     | 815                           | 694                                    | 0.012 | 101.88 | 1.17  | 1.000 | 0.99997 |
| 1092              | 5                    | 4.01                        | 944                   | 7,947                         | 972                                    | 0.971 | 8.42   | 8.18  | 1.049 | 0.99981 |
| 1094              | 4                    | 2.78                        | 41                    | 1,610                         | 1,232                                  | 0.033 | 39.27  | 1.31  | 1.000 | 0.99997 |
| 1102              | 1                    | 0.23                        | 470                   | 7,034                         | 470                                    | 1.000 | 14.97  | 14.97 | 1.000 | 0.99965 |
| 1141              | 3                    | 2.51                        | 57                    | 2,875                         | 902                                    | 0.063 | 50.44  | 3.19  | 1.163 | 0.99993 |
| 1142              | 2                    | 2.65                        | 30                    | 2,403                         | 214                                    | 0.140 | 80.10  | 11.23 | 1.000 | 0.99974 |
| 1211              | 1                    | 1.03                        | 1                     | 62                            | 1,480                                  | 0.001 | 62.00  | 0.04  | 1.000 | 0.99999 |
| 1212              | 1                    | 1.63                        | 1                     | 98                            | 332                                    | 0.003 | 98.00  | 0.30  | 1.000 | 0.99999 |
| 1213              | 1                    | 1.68                        | 1                     | 101                           | 555                                    | 0.002 | 101.00 | 0.18  | 1.000 | 0.99999 |
| 1230              | 1                    | 1.32                        | 17                    | 1,347                         | 1,177                                  | 0.014 | 79.24  | 1.14  | 1.000 | 0.99997 |
| 1232              | 4                    | 5.57                        | 46                    | 3,501                         | 1,184                                  | 0.039 | 76.11  | 2.96  | 1.000 | 0.99993 |
| 1233              | 1                    | 0.92                        | 1                     | 55                            | 640                                    | 0.002 | 55.00  | 0.09  | 1.000 | 0.99999 |
| 1241              | 2                    | 2.31                        | 23                    | 1,652                         | 854                                    | 0.027 | 71.83  | 1.93  | 1.000 | 0.99996 |
| 1243              | 1                    | 1.30                        | 1                     | 78                            | 1,208                                  | 0.001 | 78.00  | 0.06  | 1.000 | 0.99999 |

## CONFIDENTIAL 4 CSR 240-2.135(2)(A)4

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 1261              | 2                    | 3.17                        | 399                   | 12,352                        | 398                                    | 1.003 | 30.96  | 31.04  | 1.003 | 0.99928 |
| 1263              | 1                    | 0.50                        | 1,141                 | 35,142                        | 1,141                                  | 1.000 | 30.80  | 30.80  | 1.000 | 0.99929 |
| 1264              | 1                    | 0.47                        | 174                   | 5,034                         | 18                                     | 9.667 | 28.93  | 279.67 | 1.000 | 0.99353 |
| 1265              | 4                    | 4.57                        | 1,294                 | 39,887                        | 1,283                                  | 1.009 | 30.82  | 31.09  | 1.009 | 0.99928 |
| 1267              | 1                    | 0.50                        | 82                    | 2,464                         | 82                                     | 1.000 | 30.05  | 30.05  | 1.000 | 0.99930 |
| 1273              | 1                    | 2.48                        | 7                     | 1,045                         | 865                                    | 0.008 | 149.29 | 1.21   | 1.000 | 0.99997 |
| 1274              | 1                    | 1.07                        | 1                     | 64                            | 4                                      | 0.250 | 64.00  | 16.00  | 1.000 | 0.99963 |
| 1282              | 1                    | 0.60                        | 33                    | 1,189                         | 694                                    | 0.048 | 36.03  | 1.71   | 1.000 | 0.99996 |
| 1311              | 1                    | 3.67                        | 1                     | 220                           | 273                                    | 0.004 | 220.00 | 0.81   | 1.000 | 0.99998 |
| 1453              | 2                    | 6.57                        | 43                    | 13,926                        | 1,798                                  | 0.024 | 323.86 | 7.75   | 1.000 | 0.99982 |
| 1454              | 2                    | 2.39                        | 156                   | 11,924                        | 935                                    | 0.167 | 76.44  | 12.75  | 1.000 | 0.99970 |
| 1521              | 1                    | 0.92                        | 1                     | 55                            | 365                                    | 0.003 | 55.00  | 0.15   | 1.000 | 0.99999 |
| 1841              | 2                    | 1.51                        | 2                     | 91                            | 652                                    | 0.003 | 45.50  | 0.14   | 1.000 | 0.99999 |
| 1843              | 1                    | 0.65                        | 1                     | 39                            | 1,079                                  | 0.001 | 39.00  | 0.04   | 1.000 | 0.99999 |
| 2091              | 2                    | 3.56                        | 887                   | 66,292                        | 882                                    | 1.006 | 74.74  | 75.16  | 1.006 | 0.99826 |
| 2092              | 2                    | 4.32                        | 2                     | 259                           | 919                                    | 0.002 | 129.50 | 0.28   | 1.000 | 0.99999 |
| 2171              | 1                    | 1.07                        | 1                     | 64                            | 564                                    | 0.002 | 64.00  | 0.11   | 1.000 | 0.99999 |
| 2172              | 1                    | 1.50                        | 1                     | 90                            | 223                                    | 0.004 | 90.00  | 0.40   | 1.000 | 0.99999 |
| 2211              | 2                    | 0.74                        | 2                     | 44                            | 723                                    | 0.003 | 22.00  | 0.06   | 1.000 | 0.99999 |
| 2212              | 3                    | 3.19                        | 4                     | 219                           | 1,294                                  | 0.003 | 54.75  | 0.17   | 1.000 | 0.99999 |
| 2621              | 3                    | 4.92                        | 41                    | 2,982                         | 1,170                                  | 0.035 | 72.73  | 2.55   | 1.025 | 0.99994 |
| 2921              | 2                    | 3.13                        | 380                   | 28,767                        | 375                                    | 1.013 | 75.70  | 76.71  | 1.013 | 0.99822 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 2951              | 2                    | 2.02                        | 30                    | 1,573                         | 1,401                                  | 0.021 | 52.43  | 1.12   | 1.034 | 0.99997 |
| 2961              | 2                    | 2.80                        | 8                     | 640                           | 648                                    | 0.012 | 80.00  | 0.99   | 1.000 | 0.99998 |
| 3121              | 2                    | 2.18                        | 27                    | 2,034                         | 1,132                                  | 0.024 | 75.33  | 1.80   | 1.000 | 0.99996 |
| 3122              | 2                    | 5.35                        | 44                    | 2,300                         | 851                                    | 0.052 | 52.27  | 2.70   | 1.000 | 0.99994 |
| 3181              | 1                    | 3.37                        | 4                     | 808                           | 726                                    | 0.006 | 202.00 | 1.11   | 1.000 | 0.99997 |
| 3221              | 3                    | 3.57                        | 62                    | 4,173                         | 1,245                                  | 0.050 | 67.31  | 3.35   | 1.000 | 0.99992 |
| 3222              | 1                    | 1.10                        | 1                     | 66                            | 773                                    | 0.001 | 66.00  | 0.09   | 1.000 | 0.99999 |
| 3232              | 1                    | 1.38                        | 12                    | 1,001                         | 427                                    | 0.028 | 83.42  | 2.34   | 1.000 | 0.99995 |
| 3311              | 1                    | 1.58                        | 1                     | 95                            | 536                                    | 0.002 | 95.00  | 0.18   | 1.000 | 0.99999 |
| 3314              | 1                    | 2.62                        | 9                     | 1,421                         | 222                                    | 0.041 | 157.89 | 6.40   | 1.000 | 0.99985 |
| 3315              | 1                    | 0.47                        | 1                     | 28                            | 1,580                                  | 0.001 | 28.00  | 0.02   | 1.000 | 0.99999 |
| 3422              | 2                    | 2.75                        | 22                    | 1,222                         | 975                                    | 0.023 | 55.55  | 1.25   | 1.000 | 0.99997 |
| 3472              | 7                    | 6.57                        | 280                   | 5,358                         | 1,582                                  | 0.177 | 19.14  | 3.39   | 1.045 | 0.99992 |
| 3551              | 2                    | 2.00                        | 66                    | 1,451                         | 1,031                                  | 0.064 | 21.98  | 1.41   | 1.000 | 0.99997 |
| 3552              | 2                    | 1.27                        | 22                    | 696                           | 576                                    | 0.038 | 31.64  | 1.21   | 1.048 | 0.99997 |
| 3553              | 1                    | 1.02                        | 1                     | 61                            | 1,042                                  | 0.001 | 61.00  | 0.06   | 1.000 | 0.99999 |
| 3591              | 2                    | 2.78                        | 18                    | 1,570                         | 1,223                                  | 0.015 | 87.22  | 1.28   | 1.000 | 0.99997 |
| 3592              | 5                    | 5.14                        | 5                     | 309                           | 1,708                                  | 0.003 | 61.80  | 0.18   | 1.250 | 0.99999 |
| 3593              | 1                    | 1.08                        | 1                     | 65                            | 929                                    | 0.001 | 65.00  | 0.07   | 1.000 | 0.99999 |
| 3594              | 2                    | 1.67                        | 2                     | 100                           | 723                                    | 0.003 | 50.00  | 0.14   | 1.000 | 0.99999 |
| 3621              | 2                    | 2.95                        | 3,108                 | 275,498                       | 1,555                                  | 1.999 | 88.64  | 177.17 | 2.000 | 0.99590 |
| 3661              | 2                    | 1.35                        | 48                    | 2,076                         | 1,029                                  | 0.047 | 43.25  | 2.02   | 1.000 | 0.99995 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 3662              | 3                    | 1.37                        | 3                     | 82                            | 783                                    | 0.004 | 27.33  | 0.10  | 1.000 | 0.99999 |
| 3664              | 1                    | 1.20                        | 1                     | 72                            | 549                                    | 0.002 | 72.00  | 0.13  | 1.000 | 0.99999 |
| 3671              | 1                    | 3.85                        | 1                     | 231                           | 503                                    | 0.002 | 231.00 | 0.46  | 1.000 | 0.99999 |
| 3673              | 1                    | 0.12                        | 61                    | 457                           | 268                                    | 0.228 | 7.49   | 1.71  | 1.000 | 0.99996 |
| 3692              | 1                    | 1.50                        | 1                     | 90                            | 410                                    | 0.002 | 90.00  | 0.22  | 1.000 | 0.99999 |
| 3694              | 3                    | 3.77                        | 7                     | 409                           | 1,330                                  | 0.005 | 58.43  | 0.31  | 1.167 | 0.99999 |
| 3701              | 2                    | 1.20                        | 5                     | 162                           | 493                                    | 0.010 | 32.40  | 0.33  | 1.000 | 0.99999 |
| 3702              | 1                    | 0.95                        | 1                     | 57                            | 611                                    | 0.002 | 57.00  | 0.09  | 1.000 | 0.99999 |
| 3751              | 1                    | 1.08                        | 1                     | 65                            | 885                                    | 0.001 | 65.00  | 0.07  | 1.000 | 0.99999 |
| 3871              | 3                    | 2.54                        | 31                    | 1,699                         | 1,453                                  | 0.021 | 54.81  | 1.17  | 1.000 | 0.99997 |
| 3872              | 1                    | 0.80                        | 26                    | 1,263                         | 1,067                                  | 0.024 | 48.58  | 1.18  | 1.000 | 0.99997 |
| 3878              | 3                    | 2.60                        | 799                   | 11,848                        | 796                                    | 1.004 | 14.83  | 14.88 | 1.013 | 0.99966 |
| 3891              | 2                    | 1.58                        | 2                     | 95                            | 457                                    | 0.004 | 47.50  | 0.21  | 1.000 | 0.99999 |
| 3892              | 2                    | 1.84                        | 544                   | 50,407                        | 1,390                                  | 0.391 | 92.66  | 36.26 | 1.006 | 0.99916 |
| 3893              | 2                    | 2.45                        | 4                     | 339                           | 1,115                                  | 0.004 | 84.75  | 0.30  | 1.000 | 0.99999 |
| 3901              | 2                    | 2.05                        | 10                    | 832                           | 878                                    | 0.011 | 83.20  | 0.95  | 1.000 | 0.99998 |
| 3903              | 3                    | 3.89                        | 56                    | 4,312                         | 299                                    | 0.187 | 77.00  | 14.42 | 1.000 | 0.99967 |
| 3912              | 2                    | 12.27                       | 18                    | 6,629                         | 1,164                                  | 0.015 | 368.28 | 5.70  | 1.125 | 0.99987 |
| 3951              | 7                    | 13.83                       | 95                    | 7,706                         | 930                                    | 0.102 | 81.12  | 8.29  | 1.011 | 0.99981 |
| 3952              | 4                    | 3.86                        | 71                    | 5,790                         | 1,273                                  | 0.056 | 81.55  | 4.55  | 1.014 | 0.99989 |
| 3971              | 2                    | 2.95                        | 18                    | 1,436                         | 665                                    | 0.027 | 79.78  | 2.16  | 1.059 | 0.99995 |
| 3981              | 2                    | 1.26                        | 6                     | 241                           | 1,503                                  | 0.004 | 40.17  | 0.16  | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 3991              | 2                    | 1.87                        | 50                    | 2,711                         | 730                                    | 0.068 | 54.22  | 3.71  | 1.000 | 0.99991 |
| 3992              | 1                    | 1.32                        | 22                    | 1,742                         | 166                                    | 0.133 | 79.18  | 10.49 | 1.000 | 0.99976 |
| 4031              | 2                    | 5.85                        | 78                    | 5,097                         | 706                                    | 0.110 | 65.35  | 7.22  | 1.013 | 0.99983 |
| 4101              | 3                    | 5.88                        | 72                    | 9,512                         | 592                                    | 0.122 | 132.11 | 16.07 | 1.014 | 0.99963 |
| 4102              | 5                    | 8.28                        | 77                    | 9,789                         | 904                                    | 0.085 | 127.13 | 10.83 | 1.041 | 0.99975 |
| 4133              | 1                    | 1.55                        | 26                    | 2,435                         | 642                                    | 0.040 | 93.65  | 3.79  | 1.000 | 0.99991 |
| 4134              | 3                    | 3.38                        | 3                     | 203                           | 836                                    | 0.004 | 67.67  | 0.24  | 1.000 | 0.99999 |
| 4137              | 8                    | 6.60                        | 40                    | 2,136                         | 797                                    | 0.050 | 53.40  | 2.68  | 1.000 | 0.99994 |
| 4138              | 1                    | 0.50                        | 11                    | 340                           | 745                                    | 0.015 | 30.91  | 0.46  | 1.000 | 0.99999 |
| 4142              | 1                    | 0.85                        | 37                    | 1,895                         | 598                                    | 0.062 | 51.22  | 3.17  | 1.000 | 0.99993 |
| 4151              | 4                    | 3.18                        | 140                   | 5,835                         | 710                                    | 0.197 | 41.68  | 8.22  | 1.772 | 0.99981 |
| 4153              | 2                    | 1.83                        | 68                    | 3,774                         | 1,297                                  | 0.052 | 55.50  | 2.91  | 1.000 | 0.99993 |
| 4154              | 1                    | 1.62                        | 14                    | 1,369                         | 1,218                                  | 0.011 | 97.79  | 1.12  | 1.000 | 0.99997 |
| 4155              | 11                   | 18.64                       | 130                   | 13,080                        | 2,151                                  | 0.060 | 100.62 | 6.08  | 1.226 | 0.99986 |
| 4171              | 4                    | 3.16                        | 41                    | 523                           | 678                                    | 0.060 | 12.76  | 0.77  | 1.000 | 0.99998 |
| 4172              | 4                    | 3.19                        | 83                    | 5,348                         | 1,725                                  | 0.048 | 64.43  | 3.10  | 1.092 | 0.99993 |
| 4181              | 1                    | 1.02                        | 1                     | 61                            | 622                                    | 0.002 | 61.00  | 0.10  | 1.000 | 0.99999 |
| 4182              | 2                    | 7.52                        | 27                    | 2,637                         | 896                                    | 0.030 | 97.67  | 2.94  | 1.000 | 0.99993 |
| 4212              | 3                    | 10.33                       | 11                    | 916                           | 820                                    | 0.013 | 83.27  | 1.12  | 1.000 | 0.99997 |
| 4302              | 2                    | 2.45                        | 2                     | 147                           | 651                                    | 0.003 | 73.50  | 0.23  | 1.000 | 0.99999 |
| 4303              | 1                    | 4.72                        | 6                     | 1,701                         | 995                                    | 0.006 | 283.50 | 1.71  | 1.000 | 0.99996 |
| 4311              | 2                    | 1.28                        | 861                   | 51,245                        | 858                                    | 1.003 | 59.52  | 59.73 | 1.001 | 0.99862 |



| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 4312              | 1                    | 0.83                        | 1                     | 50                            | 844                                    | 0.001 | 50.00  | 0.06  | 1.000 | 0.99999 |
| 4333              | 1                    | 0.47                        | 1                     | 28                            | 684                                    | 0.001 | 28.00  | 0.04  | 1.000 | 0.99999 |
| 4341              | 6                    | 5.66                        | 35                    | 2,304                         | 1,817                                  | 0.019 | 65.83  | 1.27  | 1.029 | 0.99997 |
| 4343              | 3                    | 2.45                        | 27                    | 1,287                         | 1,028                                  | 0.026 | 47.67  | 1.25  | 1.080 | 0.99997 |
| 4361              | 2                    | 0.60                        | 2                     | 36                            | 1,768                                  | 0.001 | 18.00  | 0.02  | 1.000 | 0.99999 |
| 4362              | 1                    | 0.70                        | 1                     | 42                            | 827                                    | 0.001 | 42.00  | 0.05  | 1.000 | 0.99999 |
| 4363              | 2                    | 1.05                        | 2                     | 63                            | 1,699                                  | 0.001 | 31.50  | 0.04  | 1.000 | 0.99999 |
| 4371              | 4                    | 5.00                        | 18                    | 1,532                         | 1,545                                  | 0.012 | 85.11  | 0.99  | 1.059 | 0.99998 |
| 4373              | 1                    | 0.58                        | 1                     | 35                            | 776                                    | 0.001 | 35.00  | 0.05  | 1.000 | 0.99999 |
| 4385              | 2                    | 0.87                        | 152                   | 6,512                         | 1,119                                  | 0.136 | 42.84  | 5.82  | 1.007 | 0.99987 |
| 4386              | 1                    | 2.20                        | 1                     | 132                           | 1,662                                  | 0.001 | 132.00 | 0.08  | 1.000 | 0.99999 |
| 4431              | 4                    | 4.87                        | 4                     | 292                           | 1,387                                  | 0.003 | 73.00  | 0.21  | 1.000 | 0.99999 |
| 4475              | 1                    | 0.45                        | 1                     | 27                            | 14                                     | 0.071 | 27.00  | 1.93  | 1.000 | 0.99996 |
| 4476              | 4                    | 1.24                        | 4                     | 74                            | 32                                     | 0.125 | 18.50  | 2.31  | 1.000 | 0.99995 |
| 4511              | 1                    | 1.85                        | 9                     | 1,000                         | 1,134                                  | 0.008 | 111.11 | 0.88  | 1.000 | 0.99998 |
| 455               | 1                    | 1.00                        | 1                     | 60                            | 168                                    | 0.006 | 60.00  | 0.36  | 1.000 | 0.99999 |
| 457               | 1                    | 0.90                        | 1                     | 54                            | 179                                    | 0.006 | 54.00  | 0.30  | 1.000 | 0.99999 |
| 4601              | 1                    | 1.22                        | 3                     | 219                           | 417                                    | 0.007 | 73.00  | 0.53  | 1.000 | 0.99999 |
| 4602              | 5                    | 4.19                        | 112                   | 6,066                         | 947                                    | 0.118 | 54.16  | 6.41  | 1.018 | 0.99985 |
| 4692              | 1                    | 1.27                        | 1                     | 76                            | 471                                    | 0.002 | 76.00  | 0.16  | 1.000 | 0.99999 |
| 4714              | 1                    | 2.12                        | 1                     | 127                           | 328                                    | 0.003 | 127.00 | 0.39  | 1.000 | 0.99999 |
| 5601              | 9                    | 9.33                        | 124                   | 5,278                         | 1,172                                  | 0.106 | 42.56  | 4.50  | 1.016 | 0.99990 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 5602              | 3                    | 3.58                        | 4                     | 330                           | 681                                    | 0.006 | 82.50  | 0.48  | 1.000 | 0.99999 |
| 5603              | 5                    | 4.87                        | 145                   | 7,601                         | 1,290                                  | 0.112 | 52.42  | 5.89  | 1.051 | 0.99986 |
| 5641              | 1                    | 2.08                        | 1                     | 125                           | 322                                    | 0.003 | 125.00 | 0.39  | 1.000 | 0.99999 |
| 5905              | 1                    | 0.73                        | 29                    | 1,287                         | 1,876                                  | 0.015 | 44.38  | 0.69  | 1.000 | 0.99998 |
| 6021              | 3                    | 2.58                        | 21                    | 1,273                         | 1,298                                  | 0.016 | 60.62  | 0.98  | 1.050 | 0.99998 |
| 6141              | 1                    | 1.58                        | 391                   | 37,399                        | 632                                    | 0.619 | 95.65  | 59.18 | 1.000 | 0.99863 |
|                   | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL<br>CUSTOMERS<br>SERVED           | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
| Total:            | 297                  | 370.25                      | 14,797                | 848,767                       | 164,060                                | 0.090 | 57.36  | 5.17  | 1.136 | 0.99988 |

**THE EMPIRE DISTRICT ELECTRIC COMPANY**  
**CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI**  
10/1/2017 to 10/31/2017  
INCLUDING MAJOR EVENT DAYS

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI   | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|---------|--------|-------|---------|
| 1052              | 2                    | 1.13                        | 43                    | 923                           | 1,131                                  | 0.038 | 21.47   | 0.82   | 1.024 | 0.99998 |
| 1082              | 2                    | 7.83                        | 2                     | 470                           | 1,340                                  | 0.001 | 235.00  | 0.35   | 1.000 | 0.99999 |
| 1084              | 1                    | 0.77                        | 1                     | 46                            | 5                                      | 0.200 | 46.00   | 9.20   | 1.000 | 0.99979 |
| 1091              | 1                    | 7.02                        | 692                   | 291,770                       | 693                                    | 0.999 | 421.63  | 421.02 | 1.000 | 0.99057 |
| 1092              | 7                    | 85.95                       | 520                   | 537,893                       | 972                                    | 0.535 | 1034.41 | 553.39 | 1.268 | 0.98760 |
| 1093              | 4                    | 10.28                       | 47                    | 12,090                        | 239                                    | 0.197 | 257.23  | 50.59  | 1.044 | 0.99887 |
| 1094              | 4                    | 8.48                        | 386                   | 53,466                        | 1,232                                  | 0.313 | 138.51  | 43.40  | 1.122 | 0.99903 |
| 1211              | 3                    | 3.30                        | 3                     | 198                           | 1,480                                  | 0.002 | 66.00   | 0.13   | 1.000 | 0.99999 |
| 1212              | 1                    | 2.08                        | 1                     | 125                           | 332                                    | 0.003 | 125.00  | 0.38   | 1.000 | 0.99999 |
| 1213              | 4                    | 4.90                        | 4                     | 294                           | 555                                    | 0.007 | 73.50   | 0.53   | 1.000 | 0.99999 |
| 1230              | 2                    | 2.43                        | 71                    | 3,494                         | 1,177                                  | 0.060 | 49.21   | 2.97   | 1.000 | 0.99993 |
| 1232              | 3                    | 4.80                        | 45                    | 1,565                         | 1,184                                  | 0.038 | 34.78   | 1.32   | 1.023 | 0.99997 |
| 1241              | 1                    | 1.88                        | 1                     | 113                           | 854                                    | 0.001 | 113.00  | 0.13   | 1.000 | 0.99999 |
| 1243              | 2                    | 3.23                        | 2                     | 194                           | 1,208                                  | 0.002 | 97.00   | 0.16   | 1.000 | 0.99999 |
| 1265              | 2                    | 2.04                        | 10                    | 490                           | 1,283                                  | 0.008 | 49.00   | 0.38   | 1.000 | 0.99999 |
| 1273              | 1                    | 1.67                        | 1                     | 100                           | 865                                    | 0.001 | 100.00  | 0.12   | 1.000 | 0.99999 |
| 1282              | 3                    | 2.62                        | 74                    | 3,961                         | 694                                    | 0.107 | 53.53   | 5.71   | 1.000 | 0.99987 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 1283              | 2                    | 1.25                        | 2                     | 75                            | 357                                    | 0.006 | 37.50  | 0.21   | 1.000 | 0.99999 |
| 1284              | 6                    | 7.26                        | 103                   | 9,051                         | 949                                    | 0.109 | 87.87  | 9.54   | 1.170 | 0.99979 |
| 1285              | 1                    | 1.72                        | 41                    | 4,194                         | 1,093                                  | 0.038 | 102.29 | 3.84   | 1.000 | 0.99991 |
| 1286              | 1                    | 1.28                        | 1                     | 77                            | 58                                     | 0.017 | 77.00  | 1.33   | 1.000 | 0.99997 |
| 1312              | 1                    | 4.43                        | 47                    | 12,353                        | 939                                    | 0.050 | 262.83 | 13.16  | 1.000 | 0.99971 |
| 1452              | 1                    | 0.80                        | 4                     | 194                           | 449                                    | 0.009 | 48.50  | 0.43   | 1.000 | 0.99999 |
| 1453              | 2                    | 1.67                        | 51                    | 3,636                         | 1,798                                  | 0.028 | 71.29  | 2.02   | 1.000 | 0.99995 |
| 1454              | 1                    | 0.97                        | 1                     | 58                            | 935                                    | 0.001 | 58.00  | 0.06   | 1.000 | 0.99999 |
| 1455              | 2                    | 2.21                        | 44                    | 2,938                         | 392                                    | 0.112 | 66.77  | 7.49   | 1.000 | 0.99983 |
| 1523              | 2                    | 1.60                        | 2                     | 96                            | 733                                    | 0.003 | 48.00  | 0.13   | 1.000 | 0.99999 |
| 2091              | 1                    | 0.53                        | 11                    | 352                           | 882                                    | 0.012 | 32.00  | 0.40   | 1.000 | 0.99999 |
| 2092              | 1                    | 1.13                        | 7                     | 477                           | 919                                    | 0.008 | 68.14  | 0.52   | 1.000 | 0.99999 |
| 2171              | 1                    | 1.37                        | 59                    | 4,864                         | 564                                    | 0.105 | 82.44  | 8.62   | 1.000 | 0.99981 |
| 2211              | 2                    | 1.50                        | 18                    | 678                           | 723                                    | 0.025 | 37.67  | 0.94   | 1.000 | 0.99998 |
| 2621              | 1                    | 1.08                        | 1                     | 65                            | 1,170                                  | 0.001 | 65.00  | 0.06   | 1.000 | 0.99999 |
| 2951              | 3                    | 7.13                        | 17                    | 4,975                         | 1,401                                  | 0.012 | 292.65 | 3.55   | 1.133 | 0.99992 |
| 2961              | 7                    | 10.88                       | 156                   | 15,651                        | 648                                    | 0.241 | 100.33 | 24.15  | 1.182 | 0.99946 |
| 3121              | 2                    | 3.88                        | 1,133                 | 136,707                       | 1,132                                  | 1.001 | 120.66 | 120.77 | 1.001 | 0.99729 |
| 3122              | 1                    | 1.88                        | 31                    | 3,527                         | 851                                    | 0.036 | 113.77 | 4.14   | 1.000 | 0.99991 |
| 3181              | 1                    | 3.58                        | 726                   | 156,392                       | 726                                    | 1.000 | 215.42 | 215.42 | 1.000 | 0.99517 |
| 3221              | 3                    | 6.40                        | 57                    | 6,840                         | 1,245                                  | 0.046 | 120.00 | 5.49   | 1.036 | 0.99988 |
| 3222              | 3                    | 1.94                        | 15                    | 568                           | 773                                    | 0.019 | 37.87  | 0.73   | 1.071 | 0.99998 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 3232              | 1                    | 4.72                        | 427                   | 121,083                       | 427                                    | 1.000 | 283.57 | 283.57 | 1.000 | 0.99365 |
| 3301              | 1                    | 1.33                        | 17                    | 1,366                         | 740                                    | 0.023 | 80.35  | 1.85   | 1.000 | 0.99996 |
| 3303              | 2                    | 1.32                        | 36                    | 1,487                         | 972                                    | 0.037 | 41.31  | 1.53   | 1.000 | 0.99997 |
| 3311              | 1                    | 0.27                        | 30                    | 504                           | 536                                    | 0.056 | 16.80  | 0.94   | 1.000 | 0.99998 |
| 3313              | 3                    | 4.33                        | 21                    | 1,547                         | 1,344                                  | 0.016 | 73.67  | 1.15   | 1.000 | 0.99997 |
| 3314              | 1                    | 1.87                        | 1                     | 112                           | 222                                    | 0.005 | 112.00 | 0.50   | 1.000 | 0.99999 |
| 3315              | 4                    | 4.43                        | 55                    | 1,496                         | 1,580                                  | 0.035 | 27.20  | 0.95   | 1.078 | 0.99998 |
| 3421              | 2                    | 4.00                        | 295                   | 22,191                        | 294                                    | 1.003 | 75.22  | 75.48  | 1.003 | 0.99831 |
| 3422              | 3                    | 4.40                        | 986                   | 87,459                        | 975                                    | 1.011 | 88.70  | 89.70  | 1.022 | 0.99799 |
| 3423              | 1                    | 1.25                        | 387                   | 29,057                        | 387                                    | 1.000 | 75.08  | 75.08  | 1.000 | 0.99832 |
| 3472              | 4                    | 3.55                        | 53                    | 5,496                         | 1,582                                  | 0.034 | 103.70 | 3.47   | 1.104 | 0.99992 |
| 3551              | 1                    | 1.43                        | 1,031                 | 89,616                        | 1,031                                  | 1.000 | 86.92  | 86.92  | 1.000 | 0.99805 |
| 3553              | 1                    | 1.48                        | 1                     | 89                            | 1,040                                  | 0.001 | 89.00  | 0.09   | 1.000 | 0.99999 |
| 3591              | 2                    | 1.27                        | 9                     | 337                           | 1,223                                  | 0.007 | 37.44  | 0.28   | 1.000 | 0.99999 |
| 3592              | 9                    | 7.00                        | 93                    | 4,112                         | 1,708                                  | 0.054 | 44.22  | 2.41   | 1.011 | 0.99995 |
| 3621              | 3                    | 8.43                        | 71                    | 14,369                        | 1,555                                  | 0.046 | 202.38 | 9.24   | 1.000 | 0.99979 |
| 3663              | 3                    | 2.18                        | 31                    | 1,332                         | 737                                    | 0.042 | 42.97  | 1.81   | 1.033 | 0.99996 |
| 3664              | 2                    | 0.75                        | 2                     | 45                            | 549                                    | 0.004 | 22.50  | 0.08   | 1.000 | 0.99999 |
| 3691              | 2                    | 2.11                        | 44                    | 2,808                         | 1,163                                  | 0.038 | 63.82  | 2.41   | 1.100 | 0.99995 |
| 3693              | 1                    | 0.93                        | 9                     | 509                           | 187                                    | 0.048 | 56.56  | 2.72   | 1.000 | 0.99994 |
| 3701              | 1                    | 0.63                        | 1                     | 38                            | 493                                    | 0.002 | 38.00  | 0.08   | 1.000 | 0.99999 |
| 3751              | 1                    | 0.68                        | 8                     | 332                           | 885                                    | 0.009 | 41.50  | 0.38   | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 3871              | 1                    | 0.63                        | 1                     | 38                            | 1,404                                  | 0.001 | 38.00  | 0.03   | 1.000 | 0.99999 |
| 3873              | 1                    | 0.92                        | 1                     | 55                            | 798                                    | 0.001 | 55.00  | 0.07   | 1.000 | 0.99999 |
| 3891              | 3                    | 5.30                        | 13                    | 948                           | 457                                    | 0.028 | 72.92  | 2.07   | 1.000 | 0.99995 |
| 3893              | 2                    | 3.69                        | 8                     | 539                           | 1,115                                  | 0.007 | 67.38  | 0.48   | 1.143 | 0.99999 |
| 3901              | 2                    | 5.53                        | 16                    | 1,215                         | 878                                    | 0.018 | 75.94  | 1.38   | 1.000 | 0.99997 |
| 3903              | 1                    | 0.98                        | 1                     | 59                            | 299                                    | 0.003 | 59.00  | 0.20   | 1.000 | 0.99999 |
| 3913              | 1                    | 0.70                        | 53                    | 2,256                         | 819                                    | 0.065 | 42.57  | 2.75   | 1.000 | 0.99994 |
| 3914              | 1                    | 0.83                        | 1                     | 50                            | 375                                    | 0.003 | 50.00  | 0.13   | 1.000 | 0.99999 |
| 3951              | 5                    | 8.70                        | 55                    | 5,522                         | 930                                    | 0.059 | 100.40 | 5.94   | 1.222 | 0.99987 |
| 3952              | 2                    | 1.75                        | 3                     | 152                           | 1,273                                  | 0.002 | 50.67  | 0.12   | 1.000 | 0.99999 |
| 3953              | 2                    | 2.27                        | 2                     | 136                           | 524                                    | 0.004 | 68.00  | 0.26   | 2.000 | 0.99999 |
| 3971              | 1                    | 0.57                        | 50                    | 1,711                         | 665                                    | 0.075 | 34.22  | 2.57   | 1.000 | 0.99994 |
| 3981              | 7                    | 9.62                        | 156                   | 17,267                        | 1,503                                  | 0.104 | 110.69 | 11.49  | 1.000 | 0.99974 |
| 3982              | 5                    | 3.38                        | 169                   | 5,981                         | 1,771                                  | 0.095 | 35.39  | 3.38   | 1.000 | 0.99992 |
| 3991              | 4                    | 4.27                        | 80                    | 5,267                         | 730                                    | 0.110 | 65.84  | 7.22   | 1.013 | 0.99984 |
| 401               | 3                    | 5.98                        | 324                   | 39,032                        | 108                                    | 3.000 | 120.47 | 361.41 | 3.000 | 0.99190 |
| 402               | 3                    | 5.03                        | 3                     | 302                           | 107                                    | 0.028 | 100.67 | 2.82   | 1.000 | 0.99994 |
| 403               | 2                    | 3.56                        | 268                   | 30,454                        | 267                                    | 1.004 | 113.63 | 114.06 | 1.004 | 0.99744 |
| 4031              | 1                    | 0.77                        | 1                     | 46                            | 706                                    | 0.001 | 46.00  | 0.07   | 1.000 | 0.99999 |
| 404               | 1                    | 1.87                        | 169                   | 19,040                        | 169                                    | 1.000 | 112.66 | 112.66 | 1.000 | 0.99748 |
| 406               | 1                    | 1.85                        | 71                    | 7,912                         | 71                                     | 1.000 | 111.44 | 111.44 | 1.000 | 0.99750 |
| 407               | 1                    | 1.52                        | 1                     | 91                            | 103                                    | 0.010 | 91.00  | 0.88   | 1.000 | 0.99998 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 4091              | 1                    | 1.43                        | 1,148                 | 99,818                        | 1,148                                  | 1.000 | 86.95  | 86.95  | 1.000 | 0.99805 |
| 4092              | 2                    | 1.94                        | 444                   | 37,189                        | 433                                    | 1.025 | 83.76  | 85.89  | 1.025 | 0.99808 |
| 4131              | 1                    | 1.57                        | 1                     | 94                            | 200                                    | 0.005 | 94.00  | 0.47   | 1.000 | 0.99999 |
| 4138              | 2                    | 0.86                        | 750                   | 19,612                        | 745                                    | 1.007 | 26.15  | 26.32  | 1.007 | 0.99941 |
| 4142              | 1                    | 1.33                        | 1                     | 80                            | 598                                    | 0.002 | 80.00  | 0.13   | 1.000 | 0.99999 |
| 4153              | 2                    | 3.70                        | 403                   | 47,994                        | 1,297                                  | 0.311 | 119.09 | 37.00  | 1.002 | 0.99917 |
| 4154              | 1                    | 1.23                        | 1                     | 74                            | 1,218                                  | 0.001 | 74.00  | 0.06   | 1.000 | 0.99999 |
| 4171              | 5                    | 3.28                        | 72                    | 3,156                         | 678                                    | 0.106 | 43.83  | 4.65   | 1.263 | 0.99990 |
| 4172              | 3                    | 3.88                        | 29                    | 1,475                         | 1,725                                  | 0.017 | 50.86  | 0.86   | 1.074 | 0.99998 |
| 4181              | 4                    | 7.43                        | 59                    | 7,570                         | 622                                    | 0.095 | 128.31 | 12.17  | 1.017 | 0.99973 |
| 4182              | 1                    | 0.98                        | 23                    | 1,373                         | 896                                    | 0.026 | 59.70  | 1.53   | 1.000 | 0.99997 |
| 4211              | 4                    | 7.09                        | 18                    | 3,263                         | 710                                    | 0.025 | 181.28 | 4.60   | 1.125 | 0.99990 |
| 4212              | 2                    | 3.04                        | 36                    | 3,736                         | 820                                    | 0.044 | 103.78 | 4.56   | 1.000 | 0.99990 |
| 4222              | 1                    | 0.73                        | 1                     | 44                            | 1,045                                  | 0.001 | 44.00  | 0.04   | 1.000 | 0.99999 |
| 4224              | 1                    | 1.03                        | 1                     | 62                            | 757                                    | 0.001 | 62.00  | 0.08   | 1.000 | 0.99999 |
| 4302              | 1                    | 2.78                        | 651                   | 108,847                       | 651                                    | 1.000 | 167.20 | 167.20 | 1.000 | 0.99625 |
| 4303              | 1                    | 4.78                        | 1                     | 287                           | 995                                    | 0.001 | 287.00 | 0.29   | 1.000 | 0.99999 |
| 432               | 1                    | 1.38                        | 1                     | 83                            | 89                                     | 0.011 | 83.00  | 0.93   | 1.000 | 0.99998 |
| 4331              | 1                    | 1.55                        | 1                     | 93                            | 313                                    | 0.003 | 93.00  | 0.30   | 1.000 | 0.99999 |
| 4341              | 1                    | 1.45                        | 1                     | 87                            | 1,817                                  | 0.001 | 87.00  | 0.05   | 1.000 | 0.99999 |
| 4362              | 1                    | 0.70                        | 24                    | 1,004                         | 827                                    | 0.029 | 41.83  | 1.21   | 1.000 | 0.99997 |
| 4363              | 4                    | 5.13                        | 35                    | 2,616                         | 1,699                                  | 0.021 | 74.74  | 1.54   | 1.061 | 0.99997 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 4371              | 3                    | 1.87                        | 23                    | 736                           | 1,544                                  | 0.015 | 32.00  | 0.48   | 1.045 | 0.99999 |
| 4372              | 4                    | 4.62                        | 26                    | 1,470                         | 440                                    | 0.059 | 56.54  | 3.34   | 1.083 | 0.99993 |
| 4386              | 2                    | 6.05                        | 2                     | 363                           | 1,662                                  | 0.001 | 181.50 | 0.22   | 1.000 | 0.99999 |
| 4431              | 8                    | 23.03                       | 1,576                 | 174,462                       | 1,387                                  | 1.136 | 110.70 | 125.78 | 1.259 | 0.99718 |
| 4601              | 1                    | 1.85                        | 1                     | 111                           | 417                                    | 0.002 | 111.00 | 0.27   | 1.000 | 0.99999 |
| 4602              | 2                    | 1.86                        | 75                    | 5,093                         | 947                                    | 0.079 | 67.91  | 5.38   | 1.000 | 0.99988 |
| 4692              | 1                    | 1.28                        | 1                     | 77                            | 471                                    | 0.002 | 77.00  | 0.16   | 1.000 | 0.99999 |
| 4714              | 1                    | 2.18                        | 1                     | 131                           | 328                                    | 0.003 | 131.00 | 0.40   | 1.000 | 0.99999 |
| 5601              | 7                    | 6.43                        | 294                   | 17,929                        | 1,172                                  | 0.251 | 60.98  | 15.30  | 1.885 | 0.99966 |
| 5904              | 1                    | 0.83                        | 45                    | 2,263                         | 1,223                                  | 0.037 | 50.29  | 1.85   | 1.000 | 0.99996 |
| 5905              | 2                    | 2.12                        | 92                    | 5,468                         | 1,876                                  | 0.049 | 59.43  | 2.91   | 1.000 | 0.99993 |
| 6021              | 2                    | 1.93                        | 67                    | 4,756                         | 1,298                                  | 0.052 | 70.99  | 3.66   | 1.000 | 0.99992 |
| 6022              | 1                    | 1.10                        | 23                    | 1,519                         | 489                                    | 0.047 | 66.04  | 3.11   | 1.000 | 0.99993 |
| 6024              | 1                    | 0.80                        | 9                     | 435                           | 394                                    | 0.023 | 48.33  | 1.10   | 1.000 | 0.99998 |
| 6143              | 1                    | 2.18                        | 1                     | 131                           | 373                                    | 0.003 | 131.00 | 0.35   | 1.000 | 0.99999 |
| 6144              | 1                    | 1.42                        | 1                     | 85                            | 322                                    | 0.003 | 85.00  | 0.26   | 1.000 | 0.99999 |
| 6393              | 1                    | 1.93                        | 1                     | 116                           | 2                                      | 0.500 | 116.00 | 58.00  | 1.000 | 0.99870 |
|                   | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL<br>CUSTOMERS<br>SERVED           | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
| Total:            | 267                  | 461.75                      | 15,423                | 2,348,120                     | 165,477                                | 0.093 | 152.25 | 14.19  | 1.066 | 0.99968 |



**THE EMPIRE DISTRICT ELECTRIC COMPANY**  
**CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI**  
10/1/2017 to 10/31/2017  
EXCLUDING MAJOR EVENT DAYS

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI   | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|---------|--------|-------|---------|
| 1052              | 2                    | 1.13                        | 43                    | 923                           | 1,131                                  | 0.038 | 21.47   | 0.82   | 1.024 | 0.99998 |
| 1082              | 2                    | 7.83                        | 2                     | 470                           | 1,340                                  | 0.001 | 235.00  | 0.35   | 1.000 | 0.99999 |
| 1084              | 1                    | 0.77                        | 1                     | 46                            | 5                                      | 0.200 | 46.00   | 9.20   | 1.000 | 0.99979 |
| 1091              | 1                    | 7.02                        | 692                   | 291,770                       | 693                                    | 0.999 | 421.63  | 421.02 | 1.000 | 0.99057 |
| 1092              | 7                    | 85.95                       | 520                   | 537,893                       | 972                                    | 0.535 | 1034.41 | 553.39 | 1.268 | 0.98760 |
| 1093              | 4                    | 10.28                       | 47                    | 12,090                        | 239                                    | 0.197 | 257.23  | 50.59  | 1.044 | 0.99887 |
| 1094              | 4                    | 8.48                        | 386                   | 53,466                        | 1,232                                  | 0.313 | 138.51  | 43.40  | 1.122 | 0.99903 |
| 1211              | 3                    | 3.30                        | 3                     | 198                           | 1,480                                  | 0.002 | 66.00   | 0.13   | 1.000 | 0.99999 |
| 1212              | 1                    | 2.08                        | 1                     | 125                           | 332                                    | 0.003 | 125.00  | 0.38   | 1.000 | 0.99999 |
| 1213              | 4                    | 4.90                        | 4                     | 294                           | 555                                    | 0.007 | 73.50   | 0.53   | 1.000 | 0.99999 |
| 1230              | 2                    | 2.43                        | 71                    | 3,494                         | 1,177                                  | 0.060 | 49.21   | 2.97   | 1.000 | 0.99993 |
| 1232              | 3                    | 4.80                        | 45                    | 1,565                         | 1,184                                  | 0.038 | 34.78   | 1.32   | 1.023 | 0.99997 |
| 1241              | 1                    | 1.88                        | 1                     | 113                           | 854                                    | 0.001 | 113.00  | 0.13   | 1.000 | 0.99999 |
| 1243              | 2                    | 3.23                        | 2                     | 194                           | 1,208                                  | 0.002 | 97.00   | 0.16   | 1.000 | 0.99999 |
| 1265              | 2                    | 2.04                        | 10                    | 490                           | 1,283                                  | 0.008 | 49.00   | 0.38   | 1.000 | 0.99999 |
| 1273              | 1                    | 1.67                        | 1                     | 100                           | 865                                    | 0.001 | 100.00  | 0.12   | 1.000 | 0.99999 |
| 1282              | 3                    | 2.62                        | 74                    | 3,961                         | 694                                    | 0.107 | 53.53   | 5.71   | 1.000 | 0.99987 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 1283              | 2                    | 1.25                        | 2                     | 75                            | 357                                    | 0.006 | 37.50  | 0.21   | 1.000 | 0.99999 |
| 1284              | 6                    | 7.26                        | 103                   | 9,051                         | 949                                    | 0.109 | 87.87  | 9.54   | 1.170 | 0.99979 |
| 1285              | 1                    | 1.72                        | 41                    | 4,194                         | 1,093                                  | 0.038 | 102.29 | 3.84   | 1.000 | 0.99991 |
| 1286              | 1                    | 1.28                        | 1                     | 77                            | 58                                     | 0.017 | 77.00  | 1.33   | 1.000 | 0.99997 |
| 1312              | 1                    | 4.43                        | 47                    | 12,353                        | 939                                    | 0.050 | 262.83 | 13.16  | 1.000 | 0.99971 |
| 1452              | 1                    | 0.80                        | 4                     | 194                           | 449                                    | 0.009 | 48.50  | 0.43   | 1.000 | 0.99999 |
| 1453              | 2                    | 1.67                        | 51                    | 3,636                         | 1,798                                  | 0.028 | 71.29  | 2.02   | 1.000 | 0.99995 |
| 1454              | 1                    | 0.97                        | 1                     | 58                            | 935                                    | 0.001 | 58.00  | 0.06   | 1.000 | 0.99999 |
| 1455              | 2                    | 2.21                        | 44                    | 2,938                         | 392                                    | 0.112 | 66.77  | 7.49   | 1.000 | 0.99983 |
| 1523              | 2                    | 1.60                        | 2                     | 96                            | 733                                    | 0.003 | 48.00  | 0.13   | 1.000 | 0.99999 |
| 2091              | 1                    | 0.53                        | 11                    | 352                           | 882                                    | 0.012 | 32.00  | 0.40   | 1.000 | 0.99999 |
| 2092              | 1                    | 1.13                        | 7                     | 477                           | 919                                    | 0.008 | 68.14  | 0.52   | 1.000 | 0.99999 |
| 2171              | 1                    | 1.37                        | 59                    | 4,864                         | 564                                    | 0.105 | 82.44  | 8.62   | 1.000 | 0.99981 |
| 2211              | 2                    | 1.50                        | 18                    | 678                           | 723                                    | 0.025 | 37.67  | 0.94   | 1.000 | 0.99998 |
| 2621              | 1                    | 1.08                        | 1                     | 65                            | 1,170                                  | 0.001 | 65.00  | 0.06   | 1.000 | 0.99999 |
| 2951              | 3                    | 7.13                        | 17                    | 4,975                         | 1,401                                  | 0.012 | 292.65 | 3.55   | 1.133 | 0.99992 |
| 2961              | 7                    | 10.88                       | 156                   | 15,651                        | 648                                    | 0.241 | 100.33 | 24.15  | 1.182 | 0.99946 |
| 3121              | 2                    | 3.88                        | 1,133                 | 136,707                       | 1,132                                  | 1.001 | 120.66 | 120.77 | 1.001 | 0.99729 |
| 3122              | 1                    | 1.88                        | 31                    | 3,527                         | 851                                    | 0.036 | 113.77 | 4.14   | 1.000 | 0.99991 |
| 3181              | 1                    | 3.58                        | 726                   | 156,392                       | 726                                    | 1.000 | 215.42 | 215.42 | 1.000 | 0.99517 |
| 3221              | 3                    | 6.40                        | 57                    | 6,840                         | 1,245                                  | 0.046 | 120.00 | 5.49   | 1.036 | 0.99988 |
| 3222              | 3                    | 1.94                        | 15                    | 568                           | 773                                    | 0.019 | 37.87  | 0.73   | 1.071 | 0.99998 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 3232              | 1                    | 4.72                        | 427                   | 121,083                       | 427                                    | 1.000 | 283.57 | 283.57 | 1.000 | 0.99365 |
| 3301              | 1                    | 1.33                        | 17                    | 1,366                         | 740                                    | 0.023 | 80.35  | 1.85   | 1.000 | 0.99996 |
| 3303              | 2                    | 1.32                        | 36                    | 1,487                         | 972                                    | 0.037 | 41.31  | 1.53   | 1.000 | 0.99997 |
| 3311              | 1                    | 0.27                        | 30                    | 504                           | 536                                    | 0.056 | 16.80  | 0.94   | 1.000 | 0.99998 |
| 3313              | 3                    | 4.33                        | 21                    | 1,547                         | 1,344                                  | 0.016 | 73.67  | 1.15   | 1.000 | 0.99997 |
| 3314              | 1                    | 1.87                        | 1                     | 112                           | 222                                    | 0.005 | 112.00 | 0.50   | 1.000 | 0.99999 |
| 3315              | 4                    | 4.43                        | 55                    | 1,496                         | 1,580                                  | 0.035 | 27.20  | 0.95   | 1.078 | 0.99998 |
| 3421              | 2                    | 4.00                        | 295                   | 22,191                        | 294                                    | 1.003 | 75.22  | 75.48  | 1.003 | 0.99831 |
| 3422              | 3                    | 4.40                        | 986                   | 87,459                        | 975                                    | 1.011 | 88.70  | 89.70  | 1.022 | 0.99799 |
| 3423              | 1                    | 1.25                        | 387                   | 29,057                        | 387                                    | 1.000 | 75.08  | 75.08  | 1.000 | 0.99832 |
| 3472              | 4                    | 3.55                        | 53                    | 5,496                         | 1,582                                  | 0.034 | 103.70 | 3.47   | 1.104 | 0.99992 |
| 3551              | 1                    | 1.43                        | 1,031                 | 89,616                        | 1,031                                  | 1.000 | 86.92  | 86.92  | 1.000 | 0.99805 |
| 3553              | 1                    | 1.48                        | 1                     | 89                            | 1,040                                  | 0.001 | 89.00  | 0.09   | 1.000 | 0.99999 |
| 3591              | 2                    | 1.27                        | 9                     | 337                           | 1,223                                  | 0.007 | 37.44  | 0.28   | 1.000 | 0.99999 |
| 3592              | 9                    | 7.00                        | 93                    | 4,112                         | 1,708                                  | 0.054 | 44.22  | 2.41   | 1.011 | 0.99995 |
| 3621              | 3                    | 8.43                        | 71                    | 14,369                        | 1,555                                  | 0.046 | 202.38 | 9.24   | 1.000 | 0.99979 |
| 3663              | 3                    | 2.18                        | 31                    | 1,332                         | 737                                    | 0.042 | 42.97  | 1.81   | 1.033 | 0.99996 |
| 3664              | 2                    | 0.75                        | 2                     | 45                            | 549                                    | 0.004 | 22.50  | 0.08   | 1.000 | 0.99999 |
| 3691              | 2                    | 2.11                        | 44                    | 2,808                         | 1,163                                  | 0.038 | 63.82  | 2.41   | 1.100 | 0.99995 |
| 3693              | 1                    | 0.93                        | 9                     | 509                           | 187                                    | 0.048 | 56.56  | 2.72   | 1.000 | 0.99994 |
| 3701              | 1                    | 0.63                        | 1                     | 38                            | 493                                    | 0.002 | 38.00  | 0.08   | 1.000 | 0.99999 |
| 3751              | 1                    | 0.68                        | 8                     | 332                           | 885                                    | 0.009 | 41.50  | 0.38   | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 3871              | 1                    | 0.63                        | 1                     | 38                            | 1,404                                  | 0.001 | 38.00  | 0.03   | 1.000 | 0.99999 |
| 3873              | 1                    | 0.92                        | 1                     | 55                            | 798                                    | 0.001 | 55.00  | 0.07   | 1.000 | 0.99999 |
| 3891              | 3                    | 5.30                        | 13                    | 948                           | 457                                    | 0.028 | 72.92  | 2.07   | 1.000 | 0.99995 |
| 3893              | 2                    | 3.69                        | 8                     | 539                           | 1,115                                  | 0.007 | 67.38  | 0.48   | 1.143 | 0.99999 |
| 3901              | 2                    | 5.53                        | 16                    | 1,215                         | 878                                    | 0.018 | 75.94  | 1.38   | 1.000 | 0.99997 |
| 3903              | 1                    | 0.98                        | 1                     | 59                            | 299                                    | 0.003 | 59.00  | 0.20   | 1.000 | 0.99999 |
| 3913              | 1                    | 0.70                        | 53                    | 2,256                         | 819                                    | 0.065 | 42.57  | 2.75   | 1.000 | 0.99994 |
| 3914              | 1                    | 0.83                        | 1                     | 50                            | 375                                    | 0.003 | 50.00  | 0.13   | 1.000 | 0.99999 |
| 3951              | 5                    | 8.70                        | 55                    | 5,522                         | 930                                    | 0.059 | 100.40 | 5.94   | 1.222 | 0.99987 |
| 3952              | 2                    | 1.75                        | 3                     | 152                           | 1,273                                  | 0.002 | 50.67  | 0.12   | 1.000 | 0.99999 |
| 3953              | 2                    | 2.27                        | 2                     | 136                           | 524                                    | 0.004 | 68.00  | 0.26   | 2.000 | 0.99999 |
| 3971              | 1                    | 0.57                        | 50                    | 1,711                         | 665                                    | 0.075 | 34.22  | 2.57   | 1.000 | 0.99994 |
| 3981              | 7                    | 9.62                        | 156                   | 17,267                        | 1,503                                  | 0.104 | 110.69 | 11.49  | 1.000 | 0.99974 |
| 3982              | 5                    | 3.38                        | 169                   | 5,981                         | 1,771                                  | 0.095 | 35.39  | 3.38   | 1.000 | 0.99992 |
| 3991              | 4                    | 4.27                        | 80                    | 5,267                         | 730                                    | 0.110 | 65.84  | 7.22   | 1.013 | 0.99984 |
| 401               | 3                    | 5.98                        | 324                   | 39,032                        | 108                                    | 3.000 | 120.47 | 361.41 | 3.000 | 0.99190 |
| 402               | 3                    | 5.03                        | 3                     | 302                           | 107                                    | 0.028 | 100.67 | 2.82   | 1.000 | 0.99994 |
| 403               | 2                    | 3.56                        | 268                   | 30,454                        | 267                                    | 1.004 | 113.63 | 114.06 | 1.004 | 0.99744 |
| 4031              | 1                    | 0.77                        | 1                     | 46                            | 706                                    | 0.001 | 46.00  | 0.07   | 1.000 | 0.99999 |
| 404               | 1                    | 1.87                        | 169                   | 19,040                        | 169                                    | 1.000 | 112.66 | 112.66 | 1.000 | 0.99748 |
| 406               | 1                    | 1.85                        | 71                    | 7,912                         | 71                                     | 1.000 | 111.44 | 111.44 | 1.000 | 0.99750 |
| 407               | 1                    | 1.52                        | 1                     | 91                            | 103                                    | 0.010 | 91.00  | 0.88   | 1.000 | 0.99998 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 4091              | 1                    | 1.43                        | 1,148                 | 99,818                        | 1,148                                  | 1.000 | 86.95  | 86.95  | 1.000 | 0.99805 |
| 4092              | 2                    | 1.94                        | 444                   | 37,189                        | 433                                    | 1.025 | 83.76  | 85.89  | 1.025 | 0.99808 |
| 4131              | 1                    | 1.57                        | 1                     | 94                            | 200                                    | 0.005 | 94.00  | 0.47   | 1.000 | 0.99999 |
| 4138              | 2                    | 0.86                        | 750                   | 19,612                        | 745                                    | 1.007 | 26.15  | 26.32  | 1.007 | 0.99941 |
| 4142              | 1                    | 1.33                        | 1                     | 80                            | 598                                    | 0.002 | 80.00  | 0.13   | 1.000 | 0.99999 |
| 4153              | 2                    | 3.70                        | 403                   | 47,994                        | 1,297                                  | 0.311 | 119.09 | 37.00  | 1.002 | 0.99917 |
| 4154              | 1                    | 1.23                        | 1                     | 74                            | 1,218                                  | 0.001 | 74.00  | 0.06   | 1.000 | 0.99999 |
| 4171              | 5                    | 3.28                        | 72                    | 3,156                         | 678                                    | 0.106 | 43.83  | 4.65   | 1.263 | 0.99990 |
| 4172              | 3                    | 3.88                        | 29                    | 1,475                         | 1,725                                  | 0.017 | 50.86  | 0.86   | 1.074 | 0.99998 |
| 4181              | 4                    | 7.43                        | 59                    | 7,570                         | 622                                    | 0.095 | 128.31 | 12.17  | 1.017 | 0.99973 |
| 4182              | 1                    | 0.98                        | 23                    | 1,373                         | 896                                    | 0.026 | 59.70  | 1.53   | 1.000 | 0.99997 |
| 4211              | 4                    | 7.09                        | 18                    | 3,263                         | 710                                    | 0.025 | 181.28 | 4.60   | 1.125 | 0.99990 |
| 4212              | 2                    | 3.04                        | 36                    | 3,736                         | 820                                    | 0.044 | 103.78 | 4.56   | 1.000 | 0.99990 |
| 4222              | 1                    | 0.73                        | 1                     | 44                            | 1,045                                  | 0.001 | 44.00  | 0.04   | 1.000 | 0.99999 |
| 4224              | 1                    | 1.03                        | 1                     | 62                            | 757                                    | 0.001 | 62.00  | 0.08   | 1.000 | 0.99999 |
| 4302              | 1                    | 2.78                        | 651                   | 108,847                       | 651                                    | 1.000 | 167.20 | 167.20 | 1.000 | 0.99625 |
| 4303              | 1                    | 4.78                        | 1                     | 287                           | 995                                    | 0.001 | 287.00 | 0.29   | 1.000 | 0.99999 |
| 432               | 1                    | 1.38                        | 1                     | 83                            | 89                                     | 0.011 | 83.00  | 0.93   | 1.000 | 0.99998 |
| 4331              | 1                    | 1.55                        | 1                     | 93                            | 313                                    | 0.003 | 93.00  | 0.30   | 1.000 | 0.99999 |
| 4341              | 1                    | 1.45                        | 1                     | 87                            | 1,817                                  | 0.001 | 87.00  | 0.05   | 1.000 | 0.99999 |
| 4362              | 1                    | 0.70                        | 24                    | 1,004                         | 827                                    | 0.029 | 41.83  | 1.21   | 1.000 | 0.99997 |
| 4363              | 4                    | 5.13                        | 35                    | 2,616                         | 1,699                                  | 0.021 | 74.74  | 1.54   | 1.061 | 0.99997 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 4371              | 3                    | 1.87                        | 23                    | 736                           | 1,544                                  | 0.015 | 32.00  | 0.48   | 1.045 | 0.99999 |
| 4372              | 4                    | 4.62                        | 26                    | 1,470                         | 440                                    | 0.059 | 56.54  | 3.34   | 1.083 | 0.99993 |
| 4386              | 2                    | 6.05                        | 2                     | 363                           | 1,662                                  | 0.001 | 181.50 | 0.22   | 1.000 | 0.99999 |
| 4431              | 8                    | 23.03                       | 1,576                 | 174,462                       | 1,387                                  | 1.136 | 110.70 | 125.78 | 1.259 | 0.99718 |
| 4601              | 1                    | 1.85                        | 1                     | 111                           | 417                                    | 0.002 | 111.00 | 0.27   | 1.000 | 0.99999 |
| 4602              | 2                    | 1.86                        | 75                    | 5,093                         | 947                                    | 0.079 | 67.91  | 5.38   | 1.000 | 0.99988 |
| 4692              | 1                    | 1.28                        | 1                     | 77                            | 471                                    | 0.002 | 77.00  | 0.16   | 1.000 | 0.99999 |
| 4714              | 1                    | 2.18                        | 1                     | 131                           | 328                                    | 0.003 | 131.00 | 0.40   | 1.000 | 0.99999 |
| 5601              | 7                    | 6.43                        | 294                   | 17,929                        | 1,172                                  | 0.251 | 60.98  | 15.30  | 1.885 | 0.99966 |
| 5904              | 1                    | 0.83                        | 45                    | 2,263                         | 1,223                                  | 0.037 | 50.29  | 1.85   | 1.000 | 0.99996 |
| 5905              | 2                    | 2.12                        | 92                    | 5,468                         | 1,876                                  | 0.049 | 59.43  | 2.91   | 1.000 | 0.99993 |
| 6021              | 2                    | 1.93                        | 67                    | 4,756                         | 1,298                                  | 0.052 | 70.99  | 3.66   | 1.000 | 0.99992 |
| 6022              | 1                    | 1.10                        | 23                    | 1,519                         | 489                                    | 0.047 | 66.04  | 3.11   | 1.000 | 0.99993 |
| 6024              | 1                    | 0.80                        | 9                     | 435                           | 394                                    | 0.023 | 48.33  | 1.10   | 1.000 | 0.99998 |
| 6143              | 1                    | 2.18                        | 1                     | 131                           | 373                                    | 0.003 | 131.00 | 0.35   | 1.000 | 0.99999 |
| 6144              | 1                    | 1.42                        | 1                     | 85                            | 322                                    | 0.003 | 85.00  | 0.26   | 1.000 | 0.99999 |
| 6393              | 1                    | 1.93                        | 1                     | 116                           | 2                                      | 0.500 | 116.00 | 58.00  | 1.000 | 0.99870 |
|                   | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL<br>CUSTOMERS<br>SERVED           | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
| Total:            | 267                  | 461.75                      | 15,423                | 2,348,120                     | 165,477                                | 0.093 | 152.25 | 14.19  | 1.066 | 0.99968 |

**THE EMPIRE DISTRICT ELECTRIC COMPANY**  
**CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI**  
11/1/2017 to 11/30/2017  
INCLUDING MAJOR EVENT DAYS

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|-------|-------|-------|---------|
| 1050              | 2                    | 2.03                        | 122                   | 8,621                         | 1,606                                  | 0.076 | 70.66 | 5.37  | 1.000 | 0.99988 |
| 1082              | 10                   | 4.66                        | 10                    | 280                           | 1,340                                  | 0.007 | 28.00 | 0.21  | 1.000 | 0.99999 |
| 1092              | 4                    | 5.13                        | 84                    | 5,704                         | 972                                    | 0.086 | 67.90 | 5.87  | 1.077 | 0.99986 |
| 1094              | 4                    | 4.70                        | 27                    | 1,582                         | 1,232                                  | 0.022 | 58.59 | 1.28  | 1.000 | 0.99997 |
| 1101              | 2                    | 3.42                        | 145                   | 9,454                         | 164                                    | 0.884 | 65.20 | 57.65 | 1.028 | 0.99867 |
| 1102              | 1                    | 1.12                        | 12                    | 806                           | 470                                    | 0.026 | 67.17 | 1.71  | 1.000 | 0.99996 |
| 1211              | 3                    | 3.81                        | 64                    | 4,121                         | 1,480                                  | 0.043 | 64.39 | 2.78  | 1.032 | 0.99994 |
| 1212              | 3                    | 1.16                        | 6                     | 142                           | 332                                    | 0.018 | 23.67 | 0.43  | 1.000 | 0.99999 |
| 1213              | 1                    | 0.75                        | 555                   | 24,975                        | 555                                    | 1.000 | 45.00 | 45.00 | 1.000 | 0.99896 |
| 1230              | 1                    | 0.57                        | 1                     | 34                            | 1,177                                  | 0.001 | 34.00 | 0.03  | 1.000 | 0.99999 |
| 1232              | 2                    | 2.27                        | 24                    | 1,602                         | 1,184                                  | 0.020 | 66.75 | 1.35  | 1.000 | 0.99997 |
| 1241              | 1                    | 0.48                        | 6                     | 177                           | 854                                    | 0.007 | 29.50 | 0.21  | 1.000 | 0.99999 |
| 1242              | 1                    | 1.25                        | 1                     | 75                            | 679                                    | 0.001 | 75.00 | 0.11  | 1.000 | 0.99999 |
| 1243              | 5                    | 3.80                        | 45                    | 3,419                         | 1,208                                  | 0.037 | 75.98 | 2.83  | 1.023 | 0.99993 |
| 1263              | 2                    | 5.58                        | 47                    | 1,776                         | 1,141                                  | 0.041 | 37.79 | 1.56  | 1.000 | 0.99996 |
| 1265              | 3                    | 2.98                        | 89                    | 3,663                         | 1,283                                  | 0.069 | 41.16 | 2.86  | 1.000 | 0.99993 |
| 1271              | 1                    | 1.58                        | 13                    | 1,236                         | 965                                    | 0.013 | 95.08 | 1.28  | 1.000 | 0.99997 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 1273              | 1                    | 0.50                        | 103                   | 3,187                         | 865                                    | 0.119 | 30.94  | 3.68  | 1.000 | 0.99991 |
| 1282              | 2                    | 2.05                        | 2                     | 123                           | 694                                    | 0.003 | 61.50  | 0.18  | 1.000 | 0.99999 |
| 1284              | 11                   | 15.63                       | 59                    | 4,544                         | 949                                    | 0.062 | 77.02  | 4.79  | 1.017 | 0.99989 |
| 1285              | 2                    | 5.35                        | 26                    | 4,178                         | 1,093                                  | 0.024 | 160.69 | 3.82  | 1.000 | 0.99991 |
| 1312              | 2                    | 1.29                        | 70                    | 2,740                         | 939                                    | 0.075 | 39.14  | 2.92  | 1.000 | 0.99993 |
| 1453              | 2                    | 1.52                        | 114                   | 5,406                         | 1,798                                  | 0.063 | 47.42  | 3.01  | 1.000 | 0.99993 |
| 1521              | 2                    | 3.85                        | 2                     | 231                           | 365                                    | 0.005 | 115.50 | 0.63  | 1.000 | 0.99999 |
| 1523              | 6                    | 9.23                        | 84                    | 6,296                         | 733                                    | 0.115 | 74.95  | 8.59  | 1.012 | 0.99980 |
| 1843              | 2                    | 2.61                        | 27                    | 2,200                         | 1,079                                  | 0.025 | 81.48  | 2.04  | 1.000 | 0.99995 |
| 2091              | 1                    | 1.23                        | 1                     | 74                            | 882                                    | 0.001 | 74.00  | 0.08  | 1.000 | 0.99999 |
| 2092              | 2                    | 2.55                        | 29                    | 3,127                         | 919                                    | 0.032 | 107.83 | 3.40  | 1.000 | 0.99992 |
| 2172              | 1                    | 0.37                        | 223                   | 5,088                         | 223                                    | 1.000 | 22.82  | 22.82 | 1.000 | 0.99947 |
| 2211              | 3                    | 2.68                        | 3                     | 161                           | 723                                    | 0.004 | 53.67  | 0.22  | 1.000 | 0.99999 |
| 2621              | 1                    | 1.10                        | 12                    | 798                           | 1,170                                  | 0.010 | 66.50  | 0.68  | 1.000 | 0.99998 |
| 2951              | 2                    | 1.87                        | 17                    | 1,250                         | 1,401                                  | 0.012 | 73.53  | 0.89  | 1.000 | 0.99998 |
| 2961              | 1                    | 0.42                        | 20                    | 514                           | 648                                    | 0.031 | 25.70  | 0.79  | 1.000 | 0.99998 |
| 2962              | 1                    | 0.92                        | 1                     | 55                            | 257                                    | 0.004 | 55.00  | 0.21  | 1.000 | 0.99999 |
| 3081              | 1                    | 1.17                        | 1                     | 70                            | 574                                    | 0.002 | 70.00  | 0.12  | 1.000 | 0.99999 |
| 3181              | 1                    | 1.08                        | 1                     | 65                            | 726                                    | 0.001 | 65.00  | 0.09  | 1.000 | 0.99999 |
| 3222              | 2                    | 1.61                        | 8                     | 420                           | 773                                    | 0.010 | 52.50  | 0.54  | 1.143 | 0.99999 |
| 3231              | 2                    | 2.20                        | 2                     | 132                           | 203                                    | 0.010 | 66.00  | 0.65  | 1.000 | 0.99998 |
| 3232              | 1                    | 1.38                        | 12                    | 1,000                         | 427                                    | 0.028 | 83.33  | 2.34  | 1.000 | 0.99995 |



| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 3302              | 1                    | 1.08                        | 18                    | 1,170                         | 902                                    | 0.020 | 65.00  | 1.30   | 1.000 | 0.99997 |
| 3303              | 3                    | 2.67                        | 173                   | 8,850                         | 972                                    | 0.178 | 51.16  | 9.10   | 1.000 | 0.99979 |
| 3304              | 2                    | 1.80                        | 100                   | 8,925                         | 1,075                                  | 0.093 | 89.25  | 8.30   | 1.010 | 0.99981 |
| 3311              | 2                    | 2.02                        | 2                     | 121                           | 536                                    | 0.004 | 60.50  | 0.23   | 1.000 | 0.99999 |
| 3313              | 1                    | 1.33                        | 5                     | 403                           | 1,344                                  | 0.004 | 80.60  | 0.30   | 1.000 | 0.99999 |
| 3315              | 4                    | 4.52                        | 90                    | 6,622                         | 1,580                                  | 0.057 | 73.58  | 4.19   | 1.023 | 0.99990 |
| 3422              | 2                    | 3.20                        | 29                    | 2,635                         | 975                                    | 0.030 | 90.86  | 2.70   | 1.000 | 0.99994 |
| 3472              | 6                    | 7.84                        | 108                   | 11,649                        | 1,582                                  | 0.068 | 107.86 | 7.36   | 1.000 | 0.99983 |
| 3551              | 1                    | 0.72                        | 65                    | 2,822                         | 1,031                                  | 0.063 | 43.42  | 2.74   | 1.000 | 0.99994 |
| 3552              | 2                    | 6.18                        | 20                    | 6,170                         | 576                                    | 0.035 | 308.50 | 10.71  | 1.053 | 0.99975 |
| 3591              | 1                    | 0.48                        | 30                    | 877                           | 1,223                                  | 0.025 | 29.23  | 0.72   | 1.000 | 0.99998 |
| 3594              | 1                    | 1.35                        | 1                     | 81                            | 723                                    | 0.001 | 81.00  | 0.11   | 1.000 | 0.99999 |
| 3621              | 1                    | 0.93                        | 1                     | 56                            | 1,555                                  | 0.001 | 56.00  | 0.04   | 1.000 | 0.99999 |
| 3661              | 3                    | 17.70                       | 1,041                 | 35,448                        | 1,029                                  | 1.012 | 34.05  | 34.45  | 1.015 | 0.99920 |
| 3662              | 2                    | 2.39                        | 2                     | 143                           | 783                                    | 0.003 | 71.50  | 0.18   | 1.000 | 0.99999 |
| 3664              | 2                    | 2.22                        | 2                     | 133                           | 549                                    | 0.004 | 66.50  | 0.24   | 1.000 | 0.99999 |
| 3692              | 2                    | 2.33                        | 32                    | 1,763                         | 410                                    | 0.078 | 55.09  | 4.30   | 1.000 | 0.99990 |
| 3694              | 1                    | 1.43                        | 1,330                 | 114,402                       | 1,330                                  | 1.000 | 86.02  | 86.02  | 1.000 | 0.99801 |
| 3701              | 1                    | 1.98                        | 16                    | 1,904                         | 493                                    | 0.032 | 119.00 | 3.86   | 1.000 | 0.99991 |
| 3751              | 8                    | 12.27                       | 1,008                 | 147,437                       | 885                                    | 1.139 | 146.27 | 166.60 | 1.147 | 0.99614 |
| 3871              | 2                    | 1.73                        | 30                    | 1,434                         | 1,354                                  | 0.022 | 47.80  | 1.06   | 1.000 | 0.99998 |
| 3891              | 1                    | 1.80                        | 60                    | 6,512                         | 457                                    | 0.131 | 108.53 | 14.25  | 1.000 | 0.99967 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 3893              | 3                    | 2.32                        | 3                     | 139                           | 1,115                                  | 0.003 | 46.33  | 0.12   | 1.000 | 0.99999 |
| 3901              | 2                    | 2.09                        | 18                    | 1,114                         | 878                                    | 0.021 | 61.89  | 1.27   | 1.000 | 0.99997 |
| 3902              | 1                    | 0.88                        | 1                     | 53                            | 88                                     | 0.011 | 53.00  | 0.60   | 1.000 | 0.99999 |
| 3952              | 4                    | 7.34                        | 84                    | 5,704                         | 1,273                                  | 0.066 | 67.90  | 4.48   | 1.000 | 0.99990 |
| 3971              | 3                    | 4.17                        | 3                     | 250                           | 665                                    | 0.005 | 83.33  | 0.38   | 1.500 | 0.99999 |
| 3981              | 5                    | 5.67                        | 31                    | 2,258                         | 1,503                                  | 0.021 | 72.84  | 1.50   | 1.069 | 0.99997 |
| 3982              | 3                    | 3.87                        | 36                    | 1,948                         | 1,771                                  | 0.020 | 54.11  | 1.10   | 1.000 | 0.99997 |
| 3991              | 3                    | 1.21                        | 39                    | 1,267                         | 730                                    | 0.053 | 32.49  | 1.74   | 1.000 | 0.99996 |
| 4031              | 1                    | 0.88                        | 12                    | 645                           | 706                                    | 0.017 | 53.75  | 0.91   | 1.000 | 0.99998 |
| 4091              | 1                    | 1.78                        | 17                    | 1,757                         | 1,148                                  | 0.015 | 103.35 | 1.53   | 1.000 | 0.99996 |
| 4137              | 1                    | 0.55                        | 1                     | 33                            | 797                                    | 0.001 | 33.00  | 0.04   | 1.000 | 0.99999 |
| 4142              | 2                    | 2.88                        | 11                    | 1,172                         | 598                                    | 0.018 | 106.55 | 1.96   | 1.100 | 0.99995 |
| 4153              | 1                    | 0.90                        | 1                     | 54                            | 1,297                                  | 0.001 | 54.00  | 0.04   | 1.000 | 0.99999 |
| 4155              | 6                    | 6.98                        | 75                    | 5,486                         | 2,151                                  | 0.035 | 73.15  | 2.55   | 1.103 | 0.99994 |
| 4171              | 3                    | 2.99                        | 101                   | 4,250                         | 678                                    | 0.149 | 42.08  | 6.27   | 1.010 | 0.99985 |
| 4182              | 2                    | 4.07                        | 6                     | 812                           | 896                                    | 0.007 | 135.33 | 0.91   | 1.000 | 0.99998 |
| 4211              | 4                    | 7.15                        | 60                    | 6,459                         | 710                                    | 0.085 | 107.65 | 9.10   | 1.071 | 0.99979 |
| 4212              | 1                    | 1.20                        | 1                     | 72                            | 820                                    | 0.001 | 72.00  | 0.09   | 1.000 | 0.99999 |
| 4222              | 2                    | 2.60                        | 7                     | 530                           | 1,045                                  | 0.007 | 75.71  | 0.51   | 1.167 | 0.99999 |
| 4224              | 10                   | 58.34                       | 780                   | 170,484                       | 757                                    | 1.030 | 218.57 | 225.21 | 1.121 | 0.99479 |
| 4303              | 2                    | 7.23                        | 13                    | 2,841                         | 995                                    | 0.013 | 218.54 | 2.86   | 1.000 | 0.99993 |
| 4311              | 2                    | 1.58                        | 20                    | 959                           | 857                                    | 0.023 | 47.95  | 1.12   | 1.053 | 0.99997 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 4313              | 1                    | 1.07                        | 2                     | 129                           | 535                                    | 0.004 | 64.50  | 0.24  | 1.000 | 0.99999 |
| 4324              | 1                    | 1.90                        | 1                     | 114                           | 1,259                                  | 0.001 | 114.00 | 0.09  | 1.000 | 0.99999 |
| 433               | 1                    | 1.45                        | 1                     | 87                            | 81                                     | 0.012 | 87.00  | 1.07  | 1.000 | 0.99998 |
| 4341              | 1                    | 1.67                        | 1                     | 100                           | 1,817                                  | 0.001 | 100.00 | 0.06  | 1.000 | 0.99999 |
| 4342              | 2                    | 1.16                        | 1,764                 | 15,546                        | 1,763                                  | 1.001 | 8.81   | 8.82  | 1.001 | 0.99980 |
| 4361              | 2                    | 1.47                        | 125                   | 7,464                         | 1,766                                  | 0.071 | 59.71  | 4.23  | 1.008 | 0.99990 |
| 4371              | 1                    | 0.52                        | 21                    | 663                           | 1,544                                  | 0.014 | 31.57  | 0.43  | 1.000 | 0.99999 |
| 4373              | 3                    | 6.07                        | 42                    | 3,762                         | 776                                    | 0.054 | 89.57  | 4.85  | 1.167 | 0.99989 |
| 4431              | 15                   | 17.40                       | 1,554                 | 129,375                       | 1,387                                  | 1.120 | 83.25  | 93.28 | 1.414 | 0.99784 |
| 4432              | 1                    | 1.03                        | 6                     | 377                           | 463                                    | 0.013 | 62.83  | 0.81  | 1.000 | 0.99998 |
| 4601              | 1                    | 0.80                        | 1                     | 48                            | 417                                    | 0.002 | 48.00  | 0.12  | 1.000 | 0.99999 |
| 4692              | 2                    | 1.25                        | 2                     | 75                            | 471                                    | 0.004 | 37.50  | 0.16  | 1.000 | 0.99999 |
| 4714              | 2                    | 3.34                        | 2                     | 200                           | 328                                    | 0.006 | 100.00 | 0.61  | 2.000 | 0.99999 |
| 5601              | 2                    | 0.97                        | 31                    | 921                           | 1,172                                  | 0.026 | 29.71  | 0.79  | 1.000 | 0.99998 |
| 5603              | 8                    | 6.93                        | 157                   | 6,247                         | 1,290                                  | 0.122 | 39.79  | 4.84  | 1.026 | 0.99989 |
| 5902              | 1                    | 1.58                        | 9                     | 862                           | 944                                    | 0.010 | 95.78  | 0.91  | 1.000 | 0.99998 |
| 5905              | 1                    | 0.53                        | 1                     | 32                            | 1,876                                  | 0.001 | 32.00  | 0.02  | 1.000 | 0.99999 |
| 6142              | 1                    | 5.83                        | 13                    | 4,559                         | 311                                    | 0.042 | 350.69 | 14.66 | 1.000 | 0.99966 |
|                   | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL<br>CUSTOMERS<br>SERVED           | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
| Total:            | 252                  | 365.52                      | 11,284                | 847,731                       | 165,474                                | 0.068 | 75.13  | 5.12  | 1.054 | 0.99988 |

**THE EMPIRE DISTRICT ELECTRIC COMPANY**  
**CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI**  
 12/1/2017 to 12/31/2017  
 INCLUDING MAJOR EVENT DAYS

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 1050              | 1                    | 1.40                        | 38                    | 3,224                         | 1,606                                  | 0.024 | 84.84  | 2.01  | 1.000 | 0.99996 |
| 1051              | 1                    | 1.38                        | 1                     | 83                            | 144                                    | 0.007 | 83.00  | 0.58  | 1.000 | 0.99999 |
| 1052              | 2                    | 2.70                        | 6                     | 720                           | 1,131                                  | 0.005 | 120.00 | 0.64  | 1.000 | 0.99999 |
| 1082              | 4                    | 5.22                        | 6                     | 446                           | 1,340                                  | 0.004 | 74.33  | 0.33  | 1.000 | 0.99999 |
| 1092              | 6                    | 7.28                        | 15                    | 1,516                         | 972                                    | 0.015 | 101.07 | 1.56  | 1.071 | 0.99997 |
| 1094              | 4                    | 3.32                        | 73                    | 3,746                         | 1,232                                  | 0.059 | 51.32  | 3.04  | 1.000 | 0.99993 |
| 1102              | 1                    | 0.47                        | 62                    | 1,781                         | 470                                    | 0.132 | 28.73  | 3.79  | 1.000 | 0.99992 |
| 1103              | 1                    | 1.77                        | 1                     | 106                           | 977                                    | 0.001 | 106.00 | 0.11  | 1.000 | 0.99999 |
| 1142              | 1                    | 1.33                        | 13                    | 1,052                         | 214                                    | 0.061 | 80.92  | 4.92  | 1.000 | 0.99989 |
| 1213              | 2                    | 4.90                        | 2                     | 294                           | 555                                    | 0.004 | 147.00 | 0.53  | 1.000 | 0.99999 |
| 1230              | 2                    | 2.10                        | 18                    | 1,637                         | 1,177                                  | 0.015 | 90.94  | 1.39  | 1.000 | 0.99997 |
| 1232              | 1                    | 1.93                        | 1                     | 116                           | 1,184                                  | 0.001 | 116.00 | 0.10  | 1.000 | 0.99999 |
| 1241              | 1                    | 1.10                        | 82                    | 5,458                         | 854                                    | 0.096 | 66.56  | 6.39  | 1.000 | 0.99986 |
| 1243              | 1                    | 0.52                        | 15                    | 475                           | 1,208                                  | 0.012 | 31.67  | 0.39  | 1.000 | 0.99999 |
| 1271              | 1                    | 1.03                        | 1                     | 62                            | 965                                    | 0.001 | 62.00  | 0.06  | 1.000 | 0.99999 |
| 1274              | 1                    | 2.52                        | 1                     | 151                           | 4                                      | 0.250 | 151.00 | 37.75 | 1.000 | 0.99915 |
| 1282              | 2                    | 2.15                        | 174                   | 11,595                        | 694                                    | 0.251 | 66.64  | 16.71 | 1.000 | 0.99963 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 1284              | 1                    | 0.37                        | 1                     | 22                            | 949                                    | 0.001 | 22.00  | 0.02  | 1.000 | 0.99999 |
| 1311              | 1                    | 1.87                        | 116                   | 13,090                        | 273                                    | 0.425 | 112.84 | 47.95 | 1.000 | 0.99893 |
| 1312              | 2                    | 5.19                        | 17                    | 4,064                         | 939                                    | 0.018 | 239.06 | 4.33  | 1.063 | 0.99990 |
| 1454              | 1                    | 1.98                        | 1                     | 119                           | 935                                    | 0.001 | 119.00 | 0.13  | 1.000 | 0.99999 |
| 1521              | 1                    | 0.82                        | 1                     | 49                            | 365                                    | 0.003 | 49.00  | 0.13  | 1.000 | 0.99999 |
| 1523              | 1                    | 1.45                        | 8                     | 700                           | 733                                    | 0.011 | 87.50  | 0.95  | 1.000 | 0.99998 |
| 1843              | 4                    | 6.27                        | 6                     | 732                           | 1,079                                  | 0.006 | 122.00 | 0.68  | 1.000 | 0.99998 |
| 2091              | 1                    | 2.12                        | 1                     | 127                           | 882                                    | 0.001 | 127.00 | 0.14  | 1.000 | 0.99999 |
| 2212              | 1                    | 1.17                        | 1                     | 70                            | 1,294                                  | 0.001 | 70.00  | 0.05  | 1.000 | 0.99999 |
| 2621              | 1                    | 1.00                        | 1                     | 60                            | 1,170                                  | 0.001 | 60.00  | 0.05  | 1.000 | 0.99999 |
| 2951              | 5                    | 3.97                        | 169                   | 7,762                         | 1,401                                  | 0.121 | 45.93  | 5.54  | 1.006 | 0.99988 |
| 2961              | 4                    | 1.84                        | 671                   | 17,536                        | 648                                    | 1.035 | 26.13  | 27.06 | 1.042 | 0.99939 |
| 2962              | 1                    | 0.22                        | 257                   | 3,516                         | 257                                    | 1.000 | 13.68  | 13.68 | 1.000 | 0.99969 |
| 3123              | 1                    | 2.60                        | 1                     | 156                           | 1,055                                  | 0.001 | 156.00 | 0.15  | 1.000 | 0.99999 |
| 3221              | 2                    | 2.67                        | 2                     | 160                           | 1,245                                  | 0.002 | 80.00  | 0.13  | 1.000 | 0.99999 |
| 3222              | 2                    | 2.30                        | 774                   | 49,418                        | 773                                    | 1.001 | 63.85  | 63.93 | 1.001 | 0.99857 |
| 3303              | 1                    | 0.28                        | 82                    | 1,455                         | 972                                    | 0.084 | 17.74  | 1.50  | 1.000 | 0.99997 |
| 3304              | 2                    | 3.48                        | 3                     | 308                           | 1,075                                  | 0.003 | 102.67 | 0.29  | 1.000 | 0.99999 |
| 3313              | 1                    | 0.57                        | 1                     | 34                            | 1,344                                  | 0.001 | 34.00  | 0.03  | 1.000 | 0.99999 |
| 3422              | 3                    | 4.12                        | 3                     | 247                           | 975                                    | 0.003 | 82.33  | 0.25  | 1.000 | 0.99999 |
| 3472              | 2                    | 1.20                        | 2                     | 72                            | 1,582                                  | 0.001 | 36.00  | 0.05  | 1.000 | 0.99999 |
| 3551              | 1                    | 0.38                        | 1                     | 23                            | 1,031                                  | 0.001 | 23.00  | 0.02  | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 3592              | 3                    | 2.75                        | 4                     | 219                           | 1,708                                  | 0.002 | 54.75  | 0.13  | 1.000 | 0.99999 |
| 3621              | 4                    | 5.13                        | 4                     | 308                           | 1,555                                  | 0.003 | 77.00  | 0.20  | 1.000 | 0.99999 |
| 3661              | 2                    | 1.10                        | 104                   | 4,302                         | 1,029                                  | 0.101 | 41.37  | 4.18  | 1.000 | 0.99991 |
| 3662              | 1                    | 0.45                        | 7                     | 189                           | 783                                    | 0.009 | 27.00  | 0.24  | 1.000 | 0.99999 |
| 3663              | 2                    | 2.05                        | 266                   | 15,976                        | 737                                    | 0.361 | 60.06  | 21.68 | 1.004 | 0.99951 |
| 3664              | 1                    | 1.02                        | 1                     | 61                            | 549                                    | 0.002 | 61.00  | 0.11  | 1.000 | 0.99999 |
| 3672              | 1                    | 0.22                        | 137                   | 1,781                         | 137                                    | 1.000 | 13.00  | 13.00 | 1.000 | 0.99971 |
| 3692              | 1                    | 6.25                        | 7                     | 2,630                         | 410                                    | 0.017 | 375.71 | 6.41  | 1.000 | 0.99986 |
| 3694              | 3                    | 6.19                        | 14                    | 2,021                         | 1,330                                  | 0.011 | 144.36 | 1.52  | 1.000 | 0.99997 |
| 3701              | 2                    | 1.20                        | 508                   | 23,490                        | 493                                    | 1.030 | 46.24  | 47.65 | 1.030 | 0.99893 |
| 3751              | 2                    | 1.25                        | 10                    | 539                           | 885                                    | 0.011 | 53.90  | 0.61  | 1.000 | 0.99999 |
| 3871              | 3                    | 4.45                        | 5                     | 450                           | 1,354                                  | 0.004 | 90.00  | 0.33  | 1.000 | 0.99999 |
| 3873              | 1                    | 1.70                        | 2                     | 204                           | 798                                    | 0.003 | 102.00 | 0.26  | 1.000 | 0.99999 |
| 3878              | 1                    | 1.07                        | 17                    | 1,100                         | 796                                    | 0.021 | 64.71  | 1.38  | 1.000 | 0.99997 |
| 3891              | 2                    | 2.30                        | 20                    | 1,795                         | 457                                    | 0.044 | 89.75  | 3.93  | 1.000 | 0.99991 |
| 3893              | 4                    | 3.78                        | 22                    | 1,444                         | 1,115                                  | 0.020 | 65.64  | 1.30  | 1.000 | 0.99997 |
| 3894              | 1                    | 1.47                        | 1                     | 88                            | 117                                    | 0.009 | 88.00  | 0.75  | 1.000 | 0.99998 |
| 3901              | 1                    | 0.43                        | 50                    | 1,349                         | 878                                    | 0.057 | 26.98  | 1.54  | 1.000 | 0.99997 |
| 3903              | 2                    | 3.07                        | 12                    | 1,108                         | 299                                    | 0.040 | 92.33  | 3.71  | 1.000 | 0.99992 |
| 3914              | 3                    | 3.43                        | 157                   | 10,938                        | 375                                    | 0.419 | 69.67  | 29.17 | 1.040 | 0.99935 |
| 3951              | 17                   | 16.60                       | 45                    | 2,557                         | 930                                    | 0.048 | 56.82  | 2.75  | 1.098 | 0.99994 |
| 3952              | 3                    | 7.14                        | 67                    | 16,626                        | 1,273                                  | 0.053 | 248.15 | 13.06 | 1.000 | 0.99971 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 3981              | 7                    | 6.34                        | 7                     | 380                           | 1,503                                  | 0.005 | 54.29  | 0.25   | 1.167 | 0.99999 |
| 3982              | 3                    | 5.25                        | 30                    | 2,883                         | 1,771                                  | 0.017 | 96.10  | 1.63   | 1.000 | 0.99996 |
| 4134              | 1                    | 0.75                        | 48                    | 2,164                         | 836                                    | 0.057 | 45.08  | 2.59   | 1.000 | 0.99994 |
| 4155              | 1                    | 0.90                        | 5                     | 274                           | 2,151                                  | 0.002 | 54.80  | 0.13   | 1.000 | 0.99999 |
| 4171              | 5                    | 4.27                        | 1,182                 | 73,383                        | 678                                    | 1.743 | 62.08  | 108.23 | 1.029 | 0.99758 |
| 4172              | 14                   | 23.96                       | 211                   | 27,174                        | 1,725                                  | 0.122 | 128.79 | 15.75  | 1.060 | 0.99965 |
| 4173              | 1                    | 2.27                        | 3                     | 408                           | 635                                    | 0.005 | 136.00 | 0.64   | 1.000 | 0.99999 |
| 4181              | 1                    | 0.88                        | 1                     | 53                            | 622                                    | 0.002 | 53.00  | 0.09   | 1.000 | 0.99999 |
| 4182              | 3                    | 4.95                        | 3                     | 297                           | 896                                    | 0.003 | 99.00  | 0.33   | 1.000 | 0.99999 |
| 4211              | 1                    | 0.70                        | 1                     | 42                            | 710                                    | 0.001 | 42.00  | 0.06   | 1.000 | 0.99999 |
| 4222              | 2                    | 2.14                        | 7                     | 452                           | 1,045                                  | 0.007 | 64.57  | 0.43   | 1.167 | 0.99999 |
| 4224              | 3                    | 4.99                        | 111                   | 10,111                        | 757                                    | 0.147 | 91.09  | 13.36  | 1.088 | 0.99970 |
| 4303              | 2                    | 3.27                        | 1,006                 | 106,677                       | 995                                    | 1.011 | 106.04 | 107.21 | 1.011 | 0.99760 |
| 4321              | 1                    | 3.35                        | 4                     | 804                           | 4                                      | 1.000 | 201.00 | 201.00 | 1.000 | 0.99550 |
| 4322              | 1                    | 3.22                        | 100                   | 19,300                        | 100                                    | 1.000 | 193.00 | 193.00 | 1.000 | 0.99568 |
| 4324              | 2                    | 2.03                        | 1,274                 | 113,935                       | 1,259                                  | 1.012 | 89.43  | 90.50  | 1.014 | 0.99797 |
| 433               | 1                    | 1.40                        | 1                     | 84                            | 81                                     | 0.012 | 84.00  | 1.04   | 1.000 | 0.99998 |
| 4341              | 5                    | 5.25                        | 100                   | 4,601                         | 1,817                                  | 0.055 | 46.01  | 2.53   | 1.020 | 0.99994 |
| 4343              | 1                    | 1.33                        | 1                     | 80                            | 1,028                                  | 0.001 | 80.00  | 0.08   | 1.000 | 0.99999 |
| 4361              | 4                    | 7.03                        | 10                    | 976                           | 1,764                                  | 0.006 | 97.60  | 0.55   | 1.000 | 0.99999 |
| 4362              | 1                    | 0.82                        | 45                    | 2,225                         | 827                                    | 0.054 | 49.44  | 2.69   | 1.000 | 0.99994 |
| 4363              | 1                    | 0.65                        | 1                     | 39                            | 1,699                                  | 0.001 | 39.00  | 0.02   | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 4371              | 2                    | 1.35                        | 24                    | 1,054                         | 1,544                                  | 0.016 | 43.92  | 0.68  | 1.000 | 0.99998 |
| 4386              | 1                    | 0.87                        | 1                     | 52                            | 1,662                                  | 0.001 | 52.00  | 0.03  | 1.000 | 0.99999 |
| 4431              | 4                    | 3.24                        | 43                    | 1,858                         | 1,387                                  | 0.031 | 43.21  | 1.34  | 1.049 | 0.99997 |
| 4601              | 1                    | 0.98                        | 2                     | 118                           | 417                                    | 0.005 | 59.00  | 0.28  | 1.000 | 0.99999 |
| 4692              | 1                    | 1.58                        | 1                     | 95                            | 471                                    | 0.002 | 95.00  | 0.20  | 1.000 | 0.99999 |
| 4714              | 1                    | 1.42                        | 1                     | 85                            | 328                                    | 0.003 | 85.00  | 0.26  | 1.000 | 0.99999 |
| 5601              | 3                    | 3.81                        | 3                     | 229                           | 1,172                                  | 0.003 | 76.33  | 0.20  | 1.000 | 0.99999 |
| 5603              | 4                    | 3.75                        | 131                   | 6,289                         | 1,290                                  | 0.102 | 48.01  | 4.88  | 1.000 | 0.99989 |
| 5902              | 2                    | 2.46                        | 44                    | 2,868                         | 944                                    | 0.047 | 65.18  | 3.04  | 1.000 | 0.99993 |
| 6021              | 2                    | 2.75                        | 2                     | 165                           | 1,298                                  | 0.002 | 82.50  | 0.13  | 1.000 | 0.99999 |
| 6141              | 1                    | 1.92                        | 1                     | 115                           | 632                                    | 0.002 | 115.00 | 0.18  | 1.000 | 0.99999 |
| 6142              | 1                    | 1.58                        | 1                     | 95                            | 311                                    | 0.003 | 95.00  | 0.31  | 1.000 | 0.99999 |
|                   | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL<br>CUSTOMERS<br>SERVED           | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
| Total:            | 215                  | 271.50                      | 8,493                 | 600,722                       | 165,472                                | 0.051 | 70.73  | 3.63  | 1.012 | 0.99992 |



**THE EMPIRE DISTRICT ELECTRIC COMPANY**  
**CUSTOMER OUTAGE STATISTICS AND INDICES FOR MISSOURI**  
12/1/2017 to 12/31/2017  
EXCLUDING MAJOR EVENT DAYS

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 1050              | 1                    | 1.40                        | 38                    | 3,224                         | 1,606                                  | 0.024 | 84.84  | 2.01  | 1.000 | 0.99996 |
| 1051              | 1                    | 1.38                        | 1                     | 83                            | 144                                    | 0.007 | 83.00  | 0.58  | 1.000 | 0.99999 |
| 1052              | 2                    | 2.70                        | 6                     | 720                           | 1,131                                  | 0.005 | 120.00 | 0.64  | 1.000 | 0.99999 |
| 1082              | 4                    | 5.22                        | 6                     | 446                           | 1,340                                  | 0.004 | 74.33  | 0.33  | 1.000 | 0.99999 |
| 1092              | 6                    | 7.28                        | 15                    | 1,516                         | 972                                    | 0.015 | 101.07 | 1.56  | 1.071 | 0.99997 |
| 1094              | 4                    | 3.32                        | 73                    | 3,746                         | 1,232                                  | 0.059 | 51.32  | 3.04  | 1.000 | 0.99993 |
| 1102              | 1                    | 0.47                        | 62                    | 1,781                         | 470                                    | 0.132 | 28.73  | 3.79  | 1.000 | 0.99992 |
| 1103              | 1                    | 1.77                        | 1                     | 106                           | 977                                    | 0.001 | 106.00 | 0.11  | 1.000 | 0.99999 |
| 1142              | 1                    | 1.33                        | 13                    | 1,052                         | 214                                    | 0.061 | 80.92  | 4.92  | 1.000 | 0.99989 |
| 1213              | 2                    | 4.90                        | 2                     | 294                           | 555                                    | 0.004 | 147.00 | 0.53  | 1.000 | 0.99999 |
| 1230              | 2                    | 2.10                        | 18                    | 1,637                         | 1,177                                  | 0.015 | 90.94  | 1.39  | 1.000 | 0.99997 |
| 1232              | 1                    | 1.93                        | 1                     | 116                           | 1,184                                  | 0.001 | 116.00 | 0.10  | 1.000 | 0.99999 |
| 1241              | 1                    | 1.10                        | 82                    | 5,458                         | 854                                    | 0.096 | 66.56  | 6.39  | 1.000 | 0.99986 |
| 1243              | 1                    | 0.52                        | 15                    | 475                           | 1,208                                  | 0.012 | 31.67  | 0.39  | 1.000 | 0.99999 |
| 1271              | 1                    | 1.03                        | 1                     | 62                            | 965                                    | 0.001 | 62.00  | 0.06  | 1.000 | 0.99999 |
| 1274              | 1                    | 2.52                        | 1                     | 151                           | 4                                      | 0.250 | 151.00 | 37.75 | 1.000 | 0.99915 |
| 1282              | 2                    | 2.15                        | 174                   | 11,595                        | 694                                    | 0.251 | 66.64  | 16.71 | 1.000 | 0.99963 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 1284              | 1                    | 0.37                        | 1                     | 22                            | 949                                    | 0.001 | 22.00  | 0.02  | 1.000 | 0.99999 |
| 1311              | 1                    | 1.87                        | 116                   | 13,090                        | 273                                    | 0.425 | 112.84 | 47.95 | 1.000 | 0.99893 |
| 1312              | 2                    | 5.19                        | 17                    | 4,064                         | 939                                    | 0.018 | 239.06 | 4.33  | 1.063 | 0.99990 |
| 1454              | 1                    | 1.98                        | 1                     | 119                           | 935                                    | 0.001 | 119.00 | 0.13  | 1.000 | 0.99999 |
| 1521              | 1                    | 0.82                        | 1                     | 49                            | 365                                    | 0.003 | 49.00  | 0.13  | 1.000 | 0.99999 |
| 1523              | 1                    | 1.45                        | 8                     | 700                           | 733                                    | 0.011 | 87.50  | 0.95  | 1.000 | 0.99998 |
| 1843              | 4                    | 6.27                        | 6                     | 732                           | 1,079                                  | 0.006 | 122.00 | 0.68  | 1.000 | 0.99998 |
| 2091              | 1                    | 2.12                        | 1                     | 127                           | 882                                    | 0.001 | 127.00 | 0.14  | 1.000 | 0.99999 |
| 2212              | 1                    | 1.17                        | 1                     | 70                            | 1,294                                  | 0.001 | 70.00  | 0.05  | 1.000 | 0.99999 |
| 2621              | 1                    | 1.00                        | 1                     | 60                            | 1,170                                  | 0.001 | 60.00  | 0.05  | 1.000 | 0.99999 |
| 2951              | 5                    | 3.97                        | 169                   | 7,762                         | 1,401                                  | 0.121 | 45.93  | 5.54  | 1.006 | 0.99988 |
| 2961              | 4                    | 1.84                        | 671                   | 17,536                        | 648                                    | 1.035 | 26.13  | 27.06 | 1.042 | 0.99939 |
| 2962              | 1                    | 0.22                        | 257                   | 3,516                         | 257                                    | 1.000 | 13.68  | 13.68 | 1.000 | 0.99969 |
| 3123              | 1                    | 2.60                        | 1                     | 156                           | 1,055                                  | 0.001 | 156.00 | 0.15  | 1.000 | 0.99999 |
| 3221              | 2                    | 2.67                        | 2                     | 160                           | 1,245                                  | 0.002 | 80.00  | 0.13  | 1.000 | 0.99999 |
| 3222              | 2                    | 2.30                        | 774                   | 49,418                        | 773                                    | 1.001 | 63.85  | 63.93 | 1.001 | 0.99857 |
| 3303              | 1                    | 0.28                        | 82                    | 1,455                         | 972                                    | 0.084 | 17.74  | 1.50  | 1.000 | 0.99997 |
| 3304              | 2                    | 3.48                        | 3                     | 308                           | 1,075                                  | 0.003 | 102.67 | 0.29  | 1.000 | 0.99999 |
| 3313              | 1                    | 0.57                        | 1                     | 34                            | 1,344                                  | 0.001 | 34.00  | 0.03  | 1.000 | 0.99999 |
| 3422              | 3                    | 4.12                        | 3                     | 247                           | 975                                    | 0.003 | 82.33  | 0.25  | 1.000 | 0.99999 |
| 3472              | 2                    | 1.20                        | 2                     | 72                            | 1,582                                  | 0.001 | 36.00  | 0.05  | 1.000 | 0.99999 |
| 3551              | 1                    | 0.38                        | 1                     | 23                            | 1,031                                  | 0.001 | 23.00  | 0.02  | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 3592              | 3                    | 2.75                        | 4                     | 219                           | 1,708                                  | 0.002 | 54.75  | 0.13  | 1.000 | 0.99999 |
| 3621              | 4                    | 5.13                        | 4                     | 308                           | 1,555                                  | 0.003 | 77.00  | 0.20  | 1.000 | 0.99999 |
| 3661              | 2                    | 1.10                        | 104                   | 4,302                         | 1,029                                  | 0.101 | 41.37  | 4.18  | 1.000 | 0.99991 |
| 3662              | 1                    | 0.45                        | 7                     | 189                           | 783                                    | 0.009 | 27.00  | 0.24  | 1.000 | 0.99999 |
| 3663              | 2                    | 2.05                        | 266                   | 15,976                        | 737                                    | 0.361 | 60.06  | 21.68 | 1.004 | 0.99951 |
| 3664              | 1                    | 1.02                        | 1                     | 61                            | 549                                    | 0.002 | 61.00  | 0.11  | 1.000 | 0.99999 |
| 3672              | 1                    | 0.22                        | 137                   | 1,781                         | 137                                    | 1.000 | 13.00  | 13.00 | 1.000 | 0.99971 |
| 3692              | 1                    | 6.25                        | 7                     | 2,630                         | 410                                    | 0.017 | 375.71 | 6.41  | 1.000 | 0.99986 |
| 3694              | 3                    | 6.19                        | 14                    | 2,021                         | 1,330                                  | 0.011 | 144.36 | 1.52  | 1.000 | 0.99997 |
| 3701              | 2                    | 1.20                        | 508                   | 23,490                        | 493                                    | 1.030 | 46.24  | 47.65 | 1.030 | 0.99893 |
| 3751              | 2                    | 1.25                        | 10                    | 539                           | 885                                    | 0.011 | 53.90  | 0.61  | 1.000 | 0.99999 |
| 3871              | 3                    | 4.45                        | 5                     | 450                           | 1,354                                  | 0.004 | 90.00  | 0.33  | 1.000 | 0.99999 |
| 3873              | 1                    | 1.70                        | 2                     | 204                           | 798                                    | 0.003 | 102.00 | 0.26  | 1.000 | 0.99999 |
| 3878              | 1                    | 1.07                        | 17                    | 1,100                         | 796                                    | 0.021 | 64.71  | 1.38  | 1.000 | 0.99997 |
| 3891              | 2                    | 2.30                        | 20                    | 1,795                         | 457                                    | 0.044 | 89.75  | 3.93  | 1.000 | 0.99991 |
| 3893              | 4                    | 3.78                        | 22                    | 1,444                         | 1,115                                  | 0.020 | 65.64  | 1.30  | 1.000 | 0.99997 |
| 3894              | 1                    | 1.47                        | 1                     | 88                            | 117                                    | 0.009 | 88.00  | 0.75  | 1.000 | 0.99998 |
| 3901              | 1                    | 0.43                        | 50                    | 1,349                         | 878                                    | 0.057 | 26.98  | 1.54  | 1.000 | 0.99997 |
| 3903              | 2                    | 3.07                        | 12                    | 1,108                         | 299                                    | 0.040 | 92.33  | 3.71  | 1.000 | 0.99992 |
| 3914              | 3                    | 3.43                        | 157                   | 10,938                        | 375                                    | 0.419 | 69.67  | 29.17 | 1.040 | 0.99935 |
| 3951              | 17                   | 16.60                       | 45                    | 2,557                         | 930                                    | 0.048 | 56.82  | 2.75  | 1.098 | 0.99994 |
| 3952              | 3                    | 7.14                        | 67                    | 16,626                        | 1,273                                  | 0.053 | 248.15 | 13.06 | 1.000 | 0.99971 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI  | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|--------|-------|---------|
| 3981              | 7                    | 6.34                        | 7                     | 380                           | 1,503                                  | 0.005 | 54.29  | 0.25   | 1.167 | 0.99999 |
| 3982              | 3                    | 5.25                        | 30                    | 2,883                         | 1,771                                  | 0.017 | 96.10  | 1.63   | 1.000 | 0.99996 |
| 4134              | 1                    | 0.75                        | 48                    | 2,164                         | 836                                    | 0.057 | 45.08  | 2.59   | 1.000 | 0.99994 |
| 4155              | 1                    | 0.90                        | 5                     | 274                           | 2,151                                  | 0.002 | 54.80  | 0.13   | 1.000 | 0.99999 |
| 4171              | 5                    | 4.27                        | 1,182                 | 73,383                        | 678                                    | 1.743 | 62.08  | 108.23 | 1.029 | 0.99758 |
| 4172              | 14                   | 23.96                       | 211                   | 27,174                        | 1,725                                  | 0.122 | 128.79 | 15.75  | 1.060 | 0.99965 |
| 4173              | 1                    | 2.27                        | 3                     | 408                           | 635                                    | 0.005 | 136.00 | 0.64   | 1.000 | 0.99999 |
| 4181              | 1                    | 0.88                        | 1                     | 53                            | 622                                    | 0.002 | 53.00  | 0.09   | 1.000 | 0.99999 |
| 4182              | 3                    | 4.95                        | 3                     | 297                           | 896                                    | 0.003 | 99.00  | 0.33   | 1.000 | 0.99999 |
| 4211              | 1                    | 0.70                        | 1                     | 42                            | 710                                    | 0.001 | 42.00  | 0.06   | 1.000 | 0.99999 |
| 4222              | 2                    | 2.14                        | 7                     | 452                           | 1,045                                  | 0.007 | 64.57  | 0.43   | 1.167 | 0.99999 |
| 4224              | 3                    | 4.99                        | 111                   | 10,111                        | 757                                    | 0.147 | 91.09  | 13.36  | 1.088 | 0.99970 |
| 4303              | 2                    | 3.27                        | 1,006                 | 106,677                       | 995                                    | 1.011 | 106.04 | 107.21 | 1.011 | 0.99760 |
| 4321              | 1                    | 3.35                        | 4                     | 804                           | 4                                      | 1.000 | 201.00 | 201.00 | 1.000 | 0.99550 |
| 4322              | 1                    | 3.22                        | 100                   | 19,300                        | 100                                    | 1.000 | 193.00 | 193.00 | 1.000 | 0.99568 |
| 4324              | 2                    | 2.03                        | 1,274                 | 113,935                       | 1,259                                  | 1.012 | 89.43  | 90.50  | 1.014 | 0.99797 |
| 433               | 1                    | 1.40                        | 1                     | 84                            | 81                                     | 0.012 | 84.00  | 1.04   | 1.000 | 0.99998 |
| 4341              | 5                    | 5.25                        | 100                   | 4,601                         | 1,817                                  | 0.055 | 46.01  | 2.53   | 1.020 | 0.99994 |
| 4343              | 1                    | 1.33                        | 1                     | 80                            | 1,028                                  | 0.001 | 80.00  | 0.08   | 1.000 | 0.99999 |
| 4361              | 4                    | 7.03                        | 10                    | 976                           | 1,764                                  | 0.006 | 97.60  | 0.55   | 1.000 | 0.99999 |
| 4362              | 1                    | 0.82                        | 45                    | 2,225                         | 827                                    | 0.054 | 49.44  | 2.69   | 1.000 | 0.99994 |
| 4363              | 1                    | 0.65                        | 1                     | 39                            | 1,699                                  | 0.001 | 39.00  | 0.02   | 1.000 | 0.99999 |

| CIRCUIT<br>NUMBER | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL CUST.<br>ON AFFECTED<br>CIRCUITS | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
|-------------------|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------------------------|-------|--------|-------|-------|---------|
| 4371              | 2                    | 1.35                        | 24                    | 1,054                         | 1,544                                  | 0.016 | 43.92  | 0.68  | 1.000 | 0.99998 |
| 4386              | 1                    | 0.87                        | 1                     | 52                            | 1,662                                  | 0.001 | 52.00  | 0.03  | 1.000 | 0.99999 |
| 4431              | 4                    | 3.24                        | 43                    | 1,858                         | 1,387                                  | 0.031 | 43.21  | 1.34  | 1.049 | 0.99997 |
| 4601              | 1                    | 0.98                        | 2                     | 118                           | 417                                    | 0.005 | 59.00  | 0.28  | 1.000 | 0.99999 |
| 4692              | 1                    | 1.58                        | 1                     | 95                            | 471                                    | 0.002 | 95.00  | 0.20  | 1.000 | 0.99999 |
| 4714              | 1                    | 1.42                        | 1                     | 85                            | 328                                    | 0.003 | 85.00  | 0.26  | 1.000 | 0.99999 |
| 5601              | 3                    | 3.81                        | 3                     | 229                           | 1,172                                  | 0.003 | 76.33  | 0.20  | 1.000 | 0.99999 |
| 5603              | 4                    | 3.75                        | 131                   | 6,289                         | 1,290                                  | 0.102 | 48.01  | 4.88  | 1.000 | 0.99989 |
| 5902              | 2                    | 2.46                        | 44                    | 2,868                         | 944                                    | 0.047 | 65.18  | 3.04  | 1.000 | 0.99993 |
| 6021              | 2                    | 2.75                        | 2                     | 165                           | 1,298                                  | 0.002 | 82.50  | 0.13  | 1.000 | 0.99999 |
| 6141              | 1                    | 1.92                        | 1                     | 115                           | 632                                    | 0.002 | 115.00 | 0.18  | 1.000 | 0.99999 |
| 6142              | 1                    | 1.58                        | 1                     | 95                            | 311                                    | 0.003 | 95.00  | 0.31  | 1.000 | 0.99999 |
|                   | NUMBER OF<br>OUTAGES | OUTAGE<br>HOURS<br>REPORTED | CUSTOMERS<br>AFFECTED | CUSTOMER<br>OUTAGE<br>MINUTES | TOTAL<br>CUSTOMERS<br>SERVED           | SAIFI | CAIDI  | SAIDI | CAIFI | ASAI    |
| Total:            | 215                  | 271.50                      | 8,493                 | 600,722                       | 165,472                                | 0.051 | 70.73  | 3.63  | 1.012 | 0.99992 |