

| Cooper | | | | | | | |
|--|----------------|--------------|----------------|----------------------------|----------------------------|--------------------------|--|
| OP Recovery Table B-8 | | | | | | | |
| IE Frequency Table B-4 | | | | | | | |
| 1 crit-yr = | 8760 | crit-hr | | | | | |
| 1 shutdown-yr = | 8760 | SD-hr | | | | | |
| Offsite Power Recovery Data (Industry) | | | | IE Frequency Data (Cooper) | | | |
| Lognormal | Plant-Centered | Grid-Related | Severe-Weather | LOOP-Category | Freq (for full power ops.) | Freq (for shutdown ops.) | |
| median (hr.) = | 0.49 | 3.08 | 5.68 | PC | 4.57E-06 | 9.34E-02 | |
| EF = | 10.6 | 2.14 | 14.7 | GR | 1.63E-07 | 1.43E-03 | |
| mu = | -0.71 | 1.13 | 1.74 | SW | 5.94E-07 | 5.20E-03 | |
| sigma = | 1.44 | 0.46 | 1.63 | Total | 5.32E-06 | 1.14E-05 | |
| Time | Plant-Centered | Grid-Related | Severe-Weather | Frequency weighted average | Diesel Generators | all AC Power | |
| 0 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | |
| 0.5 | 0.496 | 1.000 | 0.932 | 0.560 | 0.917 | 0.514 | |
| 1 | 0.311 | 0.993 | 0.856 | 0.393 | 0.841 | 0.330 | |
| 1.5 | 0.219 | 0.940 | 0.793 | 0.305 | 0.771 | 0.235 | |
| 2 | 0.165 | 0.825 | 0.739 | 0.249 | 0.707 | 0.176 | |
| 2.5 | 0.129 | 0.675 | 0.692 | 0.209 | 0.648 | 0.135 | |
| 3 | 0.104 | 0.524 | 0.652 | 0.178 | 0.595 | 0.106 | |
| 3.5 | 0.086 | 0.392 | 0.617 | 0.155 | 0.545 | 0.084 | |
| 4 | 0.072 | 0.287 | 0.585 | 0.136 | 0.500 | 0.068 | |
| 4.5 | 0.062 | 0.207 | 0.557 | 0.121 | 0.459 | 0.056 | |
| 5 | 0.053 | 0.148 | 0.531 | 0.109 | 0.420 | 0.046 | |
| 5.5 | 0.046 | 0.105 | 0.508 | 0.100 | 0.386 | 0.038 | |
| 6 | 0.041 | 0.075 | 0.487 | 0.092 | 0.354 | 0.032 | |
| 6.5 | 0.036 | 0.053 | 0.467 | 0.085 | 0.324 | 0.027 | |
| 7 | 0.032 | 0.038 | 0.449 | 0.079 | 0.297 | 0.023 | |
| 7.5 | 0.029 | 0.027 | 0.433 | 0.074 | 0.273 | 0.020 | |
| 8 | 0.026 | 0.020 | 0.417 | 0.070 | 0.250 | 0.017 | |
| 8.5 | 0.024 | 0.014 | 0.403 | 0.066 | 0.229 | 0.015 | |
| 9 | 0.022 | 0.010 | 0.389 | 0.062 | 0.210 | 0.013 | |
| 9.5 | 0.020 | 0.007 | 0.377 | 0.059 | 0.193 | 0.011 | |
| 10 | 0.018 | 0.005 | 0.365 | 0.056 | 0.177 | 0.010 | |
| 10.5 | 0.017 | 0.004 | 0.354 | 0.054 | 0.162 | 0.009 | |
| 11 | 0.015 | 0.003 | 0.343 | 0.051 | 0.149 | 0.008 | |
| 11.5 | 0.014 | 0.002 | 0.333 | 0.049 | 0.136 | 0.007 | |
| 12 | 0.013 | 0.002 | 0.324 | 0.047 | 0.125 | 0.006 | |
| 12.5 | 0.012 | 1.2E-03 | 0.315 | 0.046 | 0.115 | 0.005 | |
| 13 | 0.011 | 9.3E-04 | 0.306 | 0.044 | 0.105 | 4.6E-03 | |
| 13.5 | 0.011 | 7.0E-04 | 0.298 | 0.042 | 0.096 | 4.1E-03 | |
| 14 | 0.010 | 5.3E-04 | 0.291 | 0.041 | 0.088 | 3.6E-03 | |
| 14.5 | 0.009 | 4.1E-04 | 0.283 | 0.040 | 0.081 | 3.2E-03 | |
| 15 | 0.009 | 3.1E-04 | 0.276 | 0.038 | 0.074 | 2.8E-03 | |
| 15.5 | 0.008 | 2.4E-04 | 0.270 | 0.037 | 0.068 | 2.5E-03 | |
| 16 | 0.008 | 1.9E-04 | 0.263 | 0.036 | 0.063 | 2.2E-03 | |
| 16.5 | 0.007 | 1.4E-04 | 0.257 | 0.035 | 0.057 | 2.0E-03 | |
| 17 | 0.007 | 1.1E-04 | 0.251 | 0.034 | 0.053 | 1.8E-03 | |
| 17.5 | 6.4E-03 | 8.7E-05 | 0.246 | 0.033 | 0.048 | 1.6E-03 | |
| 18 | 6.1E-03 | 6.8E-05 | 0.240 | 0.032 | 0.044 | 1.4E-03 | |
| 18.5 | 5.8E-03 | 5.4E-05 | 0.235 | 0.031 | 0.041 | 1.3E-03 | |
| 19 | 5.5E-03 | 4.2E-05 | 0.230 | 0.030 | 0.037 | 1.1E-03 | |
| 19.5 | 5.2E-03 | 3.3E-05 | 0.225 | 0.030 | 0.034 | 1.0E-03 | |
| 20 | 4.9E-03 | 2.6E-05 | 0.221 | 0.029 | 0.031 | 9.0E-04 | |
| 20.5 | 4.7E-03 | 2.1E-05 | 0.216 | 0.028 | 0.029 | 8.1E-04 | |
| 21 | 4.5E-03 | 1.7E-05 | 0.212 | 0.027 | 0.026 | 7.2E-04 | |
| 21.5 | 4.3E-03 | 1.3E-05 | 0.208 | 0.027 | 0.024 | 6.5E-04 | |
| 22 | 4.1E-03 | 1.1E-05 | 0.204 | 0.026 | 0.022 | 5.8E-04 | |
| 22.5 | 3.9E-03 | 8.6E-06 | 0.200 | 0.026 | 0.020 | 5.2E-04 | |

| Time | Plant-Centered | Grid-Related | Severe-Weather | Frequency weighted average | Diesel Generators | all AC Power |
|------|----------------|--------------|----------------|----------------------------|-------------------|--------------|
| 23 | 3.7E-03 | 7.0E-06 | 0.196 | 0.025 | 0.019 | 4.7E-04 |
| 23.5 | 3.6E-03 | 5.6E-06 | 0.192 | 0.025 | 0.017 | 4.2E-04 |
| 24 | 3.4E-03 | 4.6E-06 | 0.189 | 0.024 | 0.016 | 3.7E-04 |
| 24.5 | 3.3E-03 | 3.7E-06 | 0.186 | 0.023 | 0.014 | 3.4E-04 |
| 25 | 3.1E-03 | 3.0E-06 | 0.182 | 0.023 | 0.013 | 3.0E-04 |
| 25.5 | 3.0E-03 | 2.5E-06 | 0.179 | 0.023 | 0.012 | 2.7E-04 |
| 26 | 2.9E-03 | 2.0E-06 | 0.176 | 0.022 | 0.011 | 2.4E-04 |
| 26.5 | 2.8E-03 | 1.7E-06 | 0.173 | 0.022 | 0.010 | 2.2E-04 |
| 27 | 2.6E-03 | 1.4E-06 | 0.170 | 0.021 | 0.009 | 2.0E-04 |
| 27.5 | 2.5E-03 | 1.1E-06 | 0.167 | 0.021 | 0.009 | 1.8E-04 |
| 28 | 2.4E-03 | 9.2E-07 | 0.165 | 0.020 | 0.008 | 1.6E-04 |
| 28.5 | 2.4E-03 | 7.6E-07 | 0.162 | 0.020 | 0.007 | 1.4E-04 |
| 29 | 2.3E-03 | 6.3E-07 | 0.159 | 0.020 | 0.007 | 1.3E-04 |
| 29.5 | 2.2E-03 | 5.2E-07 | 0.157 | 0.019 | 0.006 | 1.2E-04 |
| 30 | 2.1E-03 | 4.3E-07 | 0.154 | 0.019 | 0.006 | 1.1E-04 |
| 30.5 | 2.0E-03 | 3.6E-07 | 0.152 | 0.019 | 0.005 | 9.5E-05 |
| 31 | 2.0E-03 | 3.0E-07 | 0.150 | 0.018 | 0.005 | 8.5E-05 |
| 31.5 | 1.9E-03 | 2.5E-07 | 0.147 | 0.018 | 0.004 | 7.7E-05 |
| 32 | 1.8E-03 | 2.1E-07 | 0.145 | 0.018 | 0.004 | 6.9E-05 |
| 32.5 | 1.8E-03 | 1.8E-07 | 0.143 | 0.017 | 0.004 | 6.3E-05 |
| 33 | 1.7E-03 | 1.5E-07 | 0.141 | 0.017 | 0.003 | 5.6E-05 |
| 33.5 | 1.6E-03 | 1.3E-07 | 0.139 | 0.017 | 0.003 | 5.1E-05 |
| 34 | 1.6E-03 | 1.1E-07 | 0.137 | 0.017 | 0.003 | 4.6E-05 |
| 34.5 | 1.5E-03 | 8.9E-08 | 0.135 | 0.016 | 0.003 | 4.1E-05 |
| 35 | 1.5E-03 | 7.5E-08 | 0.133 | 0.016 | 0.002 | 3.7E-05 |
| 35.5 | 1.4E-03 | 6.4E-08 | 0.131 | 0.016 | 0.002 | 3.4E-05 |
| 36 | 1.4E-03 | 5.4E-08 | 0.129 | 0.016 | 0.002 | 3.1E-05 |
| 36.5 | 1.4E-03 | 4.6E-08 | 0.128 | 0.015 | 0.002 | 2.8E-05 |
| 37 | 1.3E-03 | 3.9E-08 | 0.126 | 0.015 | 0.002 | 2.5E-05 |
| 37.5 | 1.3E-03 | 3.3E-08 | 0.124 | 0.015 | 0.002 | 2.2E-05 |
| 38 | 1.2E-03 | 2.8E-08 | 0.122 | 0.015 | 0.001 | 2.0E-05 |
| 38.5 | 1.2E-03 | 2.4E-08 | 0.121 | 0.015 | 0.001 | 1.8E-05 |
| 39 | 1.2E-03 | 2.1E-08 | 0.119 | 0.014 | 0.001 | 1.7E-05 |
| 39.5 | 1.1E-03 | 1.8E-08 | 0.118 | 0.014 | 0.001 | 1.5E-05 |
| 40 | 1.1E-03 | 1.5E-08 | 0.116 | 0.014 | 0.001 | 1.4E-05 |
| 40.5 | 1.1E-03 | 1.3E-08 | 0.115 | 0.014 | 0.001 | 1.2E-05 |
| 41 | 1.0E-03 | 1.1E-08 | 0.113 | 0.014 | 0.001 | 1.1E-05 |
| 41.5 | 1.0E-03 | 9.5E-09 | 0.112 | 0.013 | 0.001 | 1.0E-05 |
| 42 | 9.8E-04 | 8.2E-09 | 0.110 | 0.013 | 0.001 | 9.1E-06 |
| 42.5 | 9.5E-04 | 7.1E-09 | 0.109 | 0.013 | 0.001 | 8.2E-06 |
| 43 | 9.3E-04 | 6.1E-09 | 0.108 | 0.013 | 0.001 | 7.4E-06 |
| 43.5 | 9.0E-04 | 5.3E-09 | 0.106 | 0.013 | 0.001 | 6.7E-06 |
| 44 | 8.8E-04 | 4.5E-09 | 0.105 | 0.012 | 0.000 | 6.1E-06 |
| 44.5 | 8.5E-04 | 3.9E-09 | 0.104 | 0.012 | 0.000 | 5.5E-06 |
| 45 | 8.3E-04 | 3.4E-09 | 0.103 | 0.012 | 0.000 | 5.0E-06 |
| 45.5 | 8.1E-04 | 3.0E-09 | 0.101 | 0.012 | 0.000 | 4.5E-06 |
| 46 | 7.9E-04 | 2.6E-09 | 0.100 | 0.012 | 0.000 | 4.1E-06 |
| 46.5 | 7.7E-04 | 2.2E-09 | 0.099 | 0.012 | 0.000 | 3.7E-06 |
| 47 | 7.5E-04 | 1.9E-09 | 0.098 | 0.012 | 0.000 | 3.4E-06 |
| 47.5 | 7.3E-04 | 1.7E-09 | 0.097 | 0.011 | 0.000 | 3.0E-06 |
| 48 | 7.1E-04 | 1.5E-09 | 0.096 | 0.011 | 0.000 | 2.8E-06 |
| 48.5 | 6.9E-04 | 1.3E-09 | 0.095 | 0.011 | 0.000 | 2.5E-06 |
| 49 | 6.8E-04 | 1.1E-09 | 0.094 | 0.011 | 0.000 | 2.3E-06 |
| 49.5 | 6.6E-04 | 9.8E-10 | 0.093 | 0.011 | 0.000 | 2.1E-06 |
| 50 | 6.5E-04 | 8.5E-10 | 0.092 | 0.011 | 0.000 | 1.9E-06 |
| 50.5 | 6.3E-04 | 7.5E-10 | 0.091 | 0.011 | 0.000 | 1.7E-06 |
| 51 | 6.1E-04 | 6.6E-10 | 0.090 | 0.011 | 0.000 | 1.5E-06 |
| 51.5 | 6.0E-04 | 5.7E-10 | 0.089 | 0.010 | 0.000 | 1.4E-06 |
| 52 | 5.9E-04 | 5.0E-10 | 0.088 | 0.010 | 0.000 | 1.3E-06 |
| 52.5 | 5.7E-04 | 4.4E-10 | 0.087 | 0.010 | 0.000 | 1.1E-06 |
| 53 | 5.6E-04 | 3.9E-10 | 0.086 | 0.010 | 0.000 | 1.0E-06 |
| 53.5 | 5.5E-04 | 3.4E-10 | 0.085 | 0.010 | 0.000 | 9.4E-07 |
| 54 | 5.3E-04 | 3.0E-10 | 0.084 | 0.010 | 0.000 | 8.5E-07 |

| Time | Plant-Centered | Grid-Related | Severe-Weather | Frequency weighted average | Diesel Generators | all AC Power |
|------|----------------|--------------|----------------|----------------------------|-------------------|--------------|
| 54.5 | 5.2E-04 | 2.7E-10 | 0.083 | 0.010 | 0.000 | 7.7E-07 |
| 55 | 5.1E-04 | 2.3E-10 | 0.082 | 0.010 | 0.000 | 7.0E-07 |
| 55.5 | 5.0E-04 | 2.1E-10 | 0.082 | 0.010 | 0.000 | 6.3E-07 |
| 56 | 4.9E-04 | 1.8E-10 | 0.081 | 0.009 | 0.000 | 5.8E-07 |
| 56.5 | 4.8E-04 | 1.6E-10 | 0.080 | 0.009 | 0.000 | 5.2E-07 |
| 57 | 4.7E-04 | 1.4E-10 | 0.079 | 0.009 | 0.000 | 4.7E-07 |
| 57.5 | 4.6E-04 | 1.3E-10 | 0.078 | 0.009 | 0.000 | 4.3E-07 |
| 58 | 4.5E-04 | 1.1E-10 | 0.078 | 0.009 | 0.000 | 3.9E-07 |
| 58.5 | 4.4E-04 | 9.9E-11 | 0.077 | 0.009 | 0.000 | 3.5E-07 |
| 59 | 4.3E-04 | 8.8E-11 | 0.076 | 0.009 | 0.000 | 3.2E-07 |
| 59.5 | 4.2E-04 | 7.8E-11 | 0.075 | 0.009 | 0.000 | 2.9E-07 |
| 60 | 4.1E-04 | 6.9E-11 | 0.075 | 0.009 | 0.000 | 2.6E-07 |
| 60.5 | 4.0E-04 | 6.2E-11 | 0.074 | 0.009 | 0.000 | 2.4E-07 |
| 61 | 3.9E-04 | 5.5E-11 | 0.073 | 0.008 | 0.000 | 2.2E-07 |
| 61.5 | 3.9E-04 | 4.9E-11 | 0.072 | 0.008 | 0.000 | 2.0E-07 |
| 62 | 3.8E-04 | 4.3E-11 | 0.072 | 0.008 | 0.000 | 1.8E-07 |
| 62.5 | 3.7E-04 | 3.9E-11 | 0.071 | 0.008 | 0.000 | 1.6E-07 |
| 63 | 3.6E-04 | 3.4E-11 | 0.070 | 0.008 | 0.000 | 1.5E-07 |
| 63.5 | 3.6E-04 | 3.1E-11 | 0.070 | 0.008 | 0.000 | 1.3E-07 |
| 64 | 3.5E-04 | 2.7E-11 | 0.069 | 0.008 | 0.000 | 1.2E-07 |
| 64.5 | 3.4E-04 | 2.5E-11 | 0.069 | 0.008 | 0.000 | 1.1E-07 |
| 65 | 3.4E-04 | 2.2E-11 | 0.068 | 0.008 | 0.000 | 1.0E-07 |
| 65.5 | 3.3E-04 | 2.0E-11 | 0.067 | 0.008 | 0.000 | 9.2E-08 |
| 66 | 3.2E-04 | 1.8E-11 | 0.067 | 0.008 | 0.000 | 8.3E-08 |
| 66.5 | 3.2E-04 | 1.6E-11 | 0.066 | 0.008 | 0.000 | 7.6E-08 |
| 67 | 3.1E-04 | 1.4E-11 | 0.066 | 0.008 | 0.000 | 6.9E-08 |
| 67.5 | 3.0E-04 | 1.3E-11 | 0.065 | 0.008 | 0.000 | 6.2E-08 |
| 68 | 3.0E-04 | 1.1E-11 | 0.064 | 0.007 | 0.000 | 5.7E-08 |
| 68.5 | 2.9E-04 | 1.0E-11 | 0.064 | 0.007 | 0.000 | 5.2E-08 |
| 69 | 2.9E-04 | 9.1E-12 | 0.063 | 0.007 | 0.000 | 4.7E-08 |
| 69.5 | 2.8E-04 | 8.2E-12 | 0.063 | 0.007 | 0.000 | 4.3E-08 |
| 70 | 2.8E-04 | 7.4E-12 | 0.062 | 0.007 | 0.000 | 3.9E-08 |
| 70.5 | 2.7E-04 | 6.6E-12 | 0.062 | 0.007 | 0.000 | 3.5E-08 |
| 71 | 2.7E-04 | 6.0E-12 | 0.061 | 0.007 | 0.000 | 3.2E-08 |
| 71.5 | 2.6E-04 | 5.4E-12 | 0.061 | 0.007 | 0.000 | 2.9E-08 |
| 72 | 2.6E-04 | 4.8E-12 | 0.060 | 0.007 | 0.000 | 2.6E-08 |
| 72.5 | 2.5E-04 | 4.4E-12 | 0.060 | 0.007 | 0.000 | 2.4E-08 |
| 73 | 2.5E-04 | 3.9E-12 | 0.059 | 0.007 | 0.000 | 2.2E-08 |
| 73.5 | 2.4E-04 | 3.5E-12 | 0.059 | 0.007 | 0.000 | 2.0E-08 |
| 74 | 2.4E-04 | 3.2E-12 | 0.058 | 0.007 | 0.000 | 1.8E-08 |
| 74.5 | 2.4E-04 | 2.9E-12 | 0.058 | 0.007 | 0.000 | 1.6E-08 |
| 75 | 2.3E-04 | 2.6E-12 | 0.057 | 0.007 | 0.000 | 1.5E-08 |
| 75.5 | 2.3E-04 | 2.4E-12 | 0.057 | 0.007 | 0.000 | 1.4E-08 |
| 76 | 2.2E-04 | 2.1E-12 | 0.056 | 0.006 | 0.000 | 1.2E-08 |
| 76.5 | 2.2E-04 | 1.9E-12 | 0.056 | 0.006 | 0.000 | 1.1E-08 |
| 77 | 2.2E-04 | 1.7E-12 | 0.055 | 0.006 | 0.000 | 1.0E-08 |
| 77.5 | 2.1E-04 | 1.6E-12 | 0.055 | 0.006 | 0.000 | 9.3E-09 |
| 78 | 2.1E-04 | 1.4E-12 | 0.054 | 0.006 | 0.000 | 8.4E-09 |
| 78.5 | 2.1E-04 | 1.3E-12 | 0.054 | 0.006 | 0.000 | 7.7E-09 |
| 79 | 2.0E-04 | 1.2E-12 | 0.054 | 0.006 | 0.000 | 7.0E-09 |
| 79.5 | 2.0E-04 | 1.1E-12 | 0.053 | 0.006 | 0.000 | 6.3E-09 |
| 80 | 2.0E-04 | 9.7E-13 | 0.053 | 0.006 | 0.000 | 5.8E-09 |
| 80.5 | 1.9E-04 | 8.8E-13 | 0.052 | 0.006 | 0.000 | 5.3E-09 |
| 81 | 1.9E-04 | 8.0E-13 | 0.052 | 0.006 | 0.000 | 4.8E-09 |
| 81.5 | 1.9E-04 | 7.2E-13 | 0.052 | 0.006 | 0.000 | 4.3E-09 |
| 82 | 1.8E-04 | 6.6E-13 | 0.051 | 0.006 | 0.000 | 4.0E-09 |
| 82.5 | 1.8E-04 | 6.0E-13 | 0.051 | 0.006 | 0.000 | 3.6E-09 |
| 83 | 1.8E-04 | 5.4E-13 | 0.050 | 0.006 | 0.000 | 3.3E-09 |
| 83.5 | 1.7E-04 | 5.0E-13 | 0.050 | 0.006 | 0.000 | 3.0E-09 |