

## Distribution System Reliability Indices (SAIFI, SAIDI &amp; MAIFI) of Urban Feeders of UPCL for the month of May 2017

| SI No       | Name of Electricity Distribution Division | No. of Urban Feeders | Feeder Voltage | Nos of Outages > 5 Min | Total Connected Load KW | Affected Load KW | SAIFI Calculation                  |           | SAIDI Calculation                  |            | MAIFI Calculation      |                  |                                    |          |
|-------------|---|----------------------|----------------|------------------------|-------------------------|------------------|------------------------------------|-----------|------------------------------------|------------|------------------------|------------------|------------------------------------|----------|
|             |   |                      |                |                        |                         |                  | $\sum A_i \times N_i$ for Division | SAIFI     | $\sum B_i \times N_i$ for Division | SAIDI      | Nos of Outages < 5 Min | Affected Load KW | $\sum C_i \times N_i$ for Division | MAIFI    |
|             |   |                      |                |                        |                         |                  |                                    | Nos.      |                                    | Min        |                        |                  |                                    | Nos.     |
|             |   |                      |                |                        |                         |                  | 1                                  | 2         | 3                                  | 4          | 5                      | 6                | 7                                  | 8=7/5    |
| 1           | Dehradun (Rural)                          | 6                    | 11             | 296                    | 9807                    | 8486             | 520229                             | 53        | 11854401                           | 1209       | 114                    | 8486             | 204660                             | 21       |
| 2           | Vikasnagar                                | 6                    | 11             | 65                     | 17271                   | 15097            | 180054                             | 10        | 28778190                           | 1666       | 3                      | 15097            | 9584                               | 1        |
| 3           | Rishikesh                                 | 17                   | 11             | 651                    | 18537                   | 17740            | 680877                             | 37        | 4789610                            | 258        | 72                     | 17740            | 76037                              | 4        |
| 4           | Uttarkashi                                | 10                   | 11             | 182                    | 17327                   | 13027            | 331384                             | 19        | 16993850                           | 981        | 81                     | 13027            | 133061                             | 8        |
| 5           | Doiwala                                   | 3                    | 11             | 23                     | 2461                    | 2429             | 55867                              | 23        | 978887                             | 398        | 6                      | 2429             | 14574                              | 6        |
| 6           | Dehradun (North)                          | 37                   | 11             | 675                    | 45886                   | 45886            | 1089793                            | 24        | 33210451                           | 724        | 506                    | 45562            | 767214                             | 17       |
| 7           | Dehradun (South)                          | 31                   | 11             | 862                    | 69793                   | 64685            | 1875338                            | 27        | 53731537                           | 770        | 454                    | 65029            | 965237                             | 14       |
| 8           | Dehradun (Central)                        | 25                   | 11             | 337                    | 44874                   | 44874            | 729651                             | 16        | 26788881                           | 597        | 192                    | 39579            | 452330                             | 10       |
| 9           | Srinagar                                  | 5                    | 11             | 146                    | 4259                    | 2130             | 66850                              | 16        | 1844600                            | 433        | 14                     | 2130             | 6024                               | 1        |
| 10          | Pauri                                     | 7                    | 11             | 223                    | 15882                   | 6774             | 195268                             | 12        | 4513700                            | 284        | 21                     | 10357            | 33158                              | 2        |
| 11          | Tehri                                     | 14                   | 11             | 138                    | 29942                   | 29757            | 312247                             | 10        | 11054220                           | 369        | 39                     | 28613            | 85252                              | 3        |
| 12          | Gopeshwar                                 | 8                    | 11             | 441                    | 6300                    | 6300             | 338200                             | 54        | 16470538                           | 2615       | 128                    | 6300             | 88825                              | 14       |
| 13          | Narayanbagar                              | 4                    | 11             | 20                     | 4989                    | 4989             | 21097                              | 4         | 7142767                            | 1432       | 64                     | 4989             | 136067                             | 27       |
| 14          | Kotdwar                                   | 6                    | 11             | 323                    | 16469                   | 7027             | 446605                             | 27        | 17058457                           | 1036       | 9                      | 7027             | 10396                              | 1        |
| 15          | Rudraprayag                               | 3                    | 11             | 20                     | 628                     | 101              | 809                                | 1         | 66652                              | 106        | 74                     | 101              | 3978                               | 6        |
| 16          | Roorkee(Urban)                            | 25                   | 11             | 959                    | 67248                   | 45573            | 1812849                            | 27        | 36030463                           | 536        | 621                    | 45573            | 1425597                            | 21       |
| 17          | Roorkee(Rural)                            | 4                    | 11             | 568                    | 15600                   | 15600            | 2194400                            | 141       | 73073000                           | 4684       | 75                     | 15600            | 268700                             | 17       |
| 18          | Haridwar(Urban)                           | 44                   | 11             | 1051                   | 215951                  | 105100           | 2800212                            | 13        | 62061961                           | 287        | 235                    | 105100           | 629723                             | 3        |
| 19          | Haridwar(Rural)                           | 2                    | 11             | 93                     | 4627                    | 4206             | 246539                             | 53        | 10630993                           | 2298       | 15                     | 4206             | 53385                              | 12       |
| 20          | Laksar                                    | 2                    | 11             | 88                     | 4755                    | 4755             | 211320                             | 44        | 6735750                            | 1417       | 0                      | 4755             | 0                                  | 0        |
| 21          | Hadwani (Urban)                           | 16                   | 11             | 647                    | 50561                   | 14821            | 710799                             | 14        | 15407729                           | 305        | 113                    | 14821            | 110269                             | 2        |
| 22          | Haldwani (Rural)                          | 2                    | 11             | 53                     | 5836                    | 2165             | 76232                              | 13        | 1892360                            | 324        | 0                      | 2165             | 0                                  | 0        |
| 23          | Nainital                                  | 10                   | 11             | 116                    | 16721                   | 14214            | 160561                             | 10        | 49981989                           | 2989       | 827                    | 14214            | 1230433                            | 74       |
| 24          | Ramnagar                                  | 4                    | 11             | 373                    | 15995                   | 12225            | 1162030                            | 73        | 20077535                           | 1255       | 101                    | 15995            | 405685                             | 25       |
| 25          | Kashipur                                  | 10                   | 11             | 174                    | 30695                   | 30695            | 542311                             | 18        | 43573249                           | 1420       | 117                    | 30695            | 353820                             | 12       |
| 26          | Bazpur                                    | 7                    | 11             | 347                    | 16032                   | 16032            | 806032                             | 50        | 39334712                           | 2454       | 30                     | 16032            | 77239                              | 5        |
| 27          | Jaspur                                    | 4                    | 11             | 140                    | 11368                   | 11368            | 399348                             | 35        | 12383560                           | 1089       | 20                     | 11368            | 58518                              | 5        |
| 28          | Rudrapur                                  | 49                   | 11             | 111                    | 157150                  | 157150           | 349250                             | 2         | 1785500                            | 11         | 14                     | 157150           | 49600                              | 0        |
| 29          | Sitraganj                                 | 27                   | 11             | 70                     | 31488                   | 31291            | 119612                             | 4         | 947034                             | 30         | 35                     | 199931           | 54140                              | 2        |
| 30          | Almora                                    | 11                   | 11             | 557                    | 4596                    | 4597             | 38150                              | 8         | 5031975                            | 1095       | 38                     | 4604             | 11963                              | 3        |
| 31          | Bageshwar                                 | 1                    | 11             | 131                    | 4157                    | 4157             | 544567                             | 131       | 10222063                           | 2459       | 21                     | 4157             | 87297                              | 21       |
| 32          | Ranikhet                                  | 5                    | 11             | 130                    | 2673                    | 2673             | 106695                             | 40        | 4384359                            | 1640       | 25                     | 2673             | 17803                              | 7        |
| 33          | Pithoragarh                               | 10                   | 11             | 490                    | 558                     | 410              | 24427                              | 44        | 1456270                            | 2610       | 212                    | 410              | 9752                               | 17       |
| 34          | Dharchula                                 | 4                    | 11             | 90                     | 6179                    | 6185             | 131843                             | 21        | 21141135                           | 3421       | 100                    | 6185             | 152942                             | 25       |
| 35          | Champawat                                 | 5                    | 11             | 74                     | 9145                    | 8918             | 134653                             | 15        | 31396285                           | 3433       | 44                     | 8918             | 74398                              | 8        |
| <b>UPCL</b> |   | <b>424</b>           | <b>11</b>      | <b>10664</b>           | <b>975759</b>           | <b>761435</b>    | <b>19416098</b>                    | <b>20</b> | <b>682824662</b>                   | <b>700</b> | <b>4420</b>            | <b>931016</b>    | <b>8057661</b>                     | <b>8</b> |

## Distribution System Reliability Indices (SAIFI, SAIDI &amp; MAIFI) of Rural Feeders of UPCL for the month of May 2017

| SI No | Name of Electricity Distribution Division | No. of Rural Feeders | Feeder Voltage | Nos of Outages > 5 Min | Total Connected Load KW | Affected Load KW | SAIFI Calculation                  |           | SAIDI Calculation                  |             | MAIFI Calculation      |                  |                                    |           |
|-------|---|----------------------|----------------|------------------------|-------------------------|------------------|------------------------------------|-----------|------------------------------------|-------------|------------------------|------------------|------------------------------------|-----------|
|       |   |                      |                |                        |                         |                  | $\sum A_i \times N_i$ for Division | SAIFI     | $\sum B_i \times N_i$ for Division | SAIDI       | Nos of Outages < 5 Min | Affected Load KW | $\sum C_i \times N_i$ for Division | MAIFI     |
|       |   |                      |                |                        |                         |                  |                                    | Nos.      |                                    | Min         |                        |                  |                                    | Nos.      |
|       |   |                      |                |                        |                         |                  | 1                                  | 2         | 3                                  | 4           | 5                      | 6                | 7                                  | 8=7/5     |
| 1     | Dehradun (Rural)                          | 49                   | 11             | 2172                   | 191313                  | 96372            | 5784793                            | 30        | 191576251                          | 1001        | 1338                   | 96372            | 3055264                            | 16        |
| 2     | Vikasnagar                                | 29                   | 11             | 532                    | 49117                   | 41032            | 1121995                            | 23        | 129608632                          | 2639        | 34                     | 41032            | 64667                              | 1         |
| 3     | Rishikesh                                 | 12                   | 11             | 506                    | 12226                   | 12026            | 515032                             | 42        | 3035362                            | 248         | 54                     | 12026            | 54164                              | 4         |
| 4     | Uttarkashi                                | 23                   | 11             | 581                    | 35952                   | 29711            | 940178                             | 26        | 32041827                           | 891         | 299                    | 29711            | 408762                             | 11        |
| 5     | Doiwala                                   | 15                   | 11             | 320                    | 13321                   | 13208            | 497074                             | 37        | 13982555                           | 1050        | 70                     | 13208            | 118272                             | 9         |
| 6     | Dehradun (North)                          | -                    | -              | -                      | -                       | -                | -                                  | -         | -                                  | -           | -                      | -                | -                                  | -         |
| 7     | Dehradun (South)                          | -                    | -              | -                      | -                       | -                | -                                  | -         | -                                  | -           | -                      | -                | -                                  | -         |
| 8     | Dehradun (Central)                        | -                    | -              | -                      | -                       | -                | -                                  | -         | -                                  | -           | -                      | -                | -                                  | -         |
| 9     | Srinagar                                  | 27                   | 11             | 888                    | 14688                   | 7344             | 266063                             | 18        | 9742836                            | 663         | 111                    | 7344             | 37797                              | 3         |
| 10    | Pauri                                     | 31                   | 11             | 783                    | 40405                   | 15699            | 596096                             | 15        | 17183448                           | 425         | 233                    | 14082            | 116921                             | 3         |
| 11    | Tehri                                     | 59                   | 11             | 1946                   | 94061                   | 93998            | 4394155                            | 47        | 200726170                          | 2134        | 231                    | 97689            | 266772                             | 3         |
| 12    | Gopeshwar                                 | 12                   | 11             | 707                    | 9263                    | 9263             | 574926                             | 62        | 37504132                           | 4049        | 250                    | 9263             | 186913                             | 20        |
| 13    | Narayanbagar                              | 19                   | 11             | 261                    | 29210                   | 29210            | 636805                             | 22        | 80161621                           | 2744        | 650                    | 29210            | 1208814                            | 41        |
| 14    | Kotdwar                                   | 48                   | 11             | 2987                   | 54537                   | 33176            | 2112306                            | 39        | 68294208                           | 1252        | 192                    | 33176            | 102601                             | 2         |
| 15    | Rudraprayag                               | 17                   | 11             | 434                    | 5316                    | 822              | 21198                              | 4         | 983908                             | 185         | 612                    | 815              | 32660                              | 6         |
| 16    | Roorkee(Urban)                            | 17                   | 11             | 618                    | 49825                   | 31393            | 1121134                            | 23        | 22196811                           | 445         | 416                    | 31393            | 891164                             | 18        |
| 17    | Roorkee(Rural)                            | 63                   | 11             | 6382                   | 148888                  | 134767           | 13235723                           | 89        | 603707176                          | 4055        | 667                    | 130811           | 1621025                            | 11        |
| 18    | Haridwar(Urban)                           | 6                    | 11             | 169                    | 12929                   | 9260             | 468268                             | 36        | 11354335                           | 878         | 136                    | 9260             | 359560                             | 28        |
| 19    | Haridwar(Rural)                           | 80                   | 11             | 2255                   | 184254                  | 167494           | 5776386                            | 31        | 241151019                          | 1309        | 510                    | 167494           | 1499977                            | 8         |
| 20    | Laksar                                    | 20                   | 11             | 1540                   | 28919                   | 28919            | 2332183                            | 81        | 124575480                          | 4308        | 144                    | 28919            | 157552                             | 5         |
| 21    | Haldwani (Urban)                          | 4                    | 11             | 184                    | 13273                   | 1651             | 108984                             | 8         | 3764610                            | 284         | 77                     | 1651             | 46051                              | 3         |
| 22    | Haldwani (Rural)                          | 35                   | 11             | 1586                   | 173313                  | 62508            | 3532007                            | 20        | 61585463                           | 355         | 299                    | 62508            | 534899                             | 3         |
| 23    | Nainital                                  | 29                   | 11             | 388                    | 15264                   | 12532            | 266484                             | 17        | 55068548                           | 3608        | 2396                   | 15214            | 1563150                            | 102       |
| 24    | Ramnagar                                  | 15                   | 11             | 523                    | 22585                   | 22304            | 1129023                            | 50        | 50832966                           | 2251        | 440                    | 22585            | 832272                             | 37        |
| 25    | Kashipur                                  | 22                   | 11             | 397                    | 53811                   | 53811            | 1032904                            | 19        | 161612978                          | 3003        | 273                    | 53811            | 782369                             | 15        |
| 26    | Bazpur                                    | 18                   | 11             | 984                    | 41172                   | 41167            | 2565241                            | 62        | 148668103                          | 3611        | 67                     | 41167            | 146230                             | 4         |
| 27    | Jaspur                                    | 27                   | 11             | 1100                   | 41637                   | 41637            | 2058984                            | 49        | 128348645                          | 3083        | 209                    | 41637            | 405438                             | 10        |
| 28    | Rudrapur                                  | 80                   | 11             | 300                    | 182320                  | 172740           | 650080                             | 4         | 3218400                            | 18          | 24                     | 182320           | 52090                              | 0         |
| 29    | Sitraganj                                 | 33                   | 11             | 205                    | 66164                   | 61994            | 429152                             | 6         | 4341008                            | 66          | 75                     | 61994            | 155787                             | 2         |
| 30    | Almora                                    | 22                   | 11             | 2215                   | 10154                   | 9740             | 1043670                            | 103       | 22402800                           | 2206        | 239                    | 10154            | 109384                             | 11        |
| 31    | Bageshwar                                 | 22                   | 11             | 2251                   | 39150                   | 39150            | 4457051                            | 114       | 82187113                           | 2099        | 521                    | 39150            | 970835                             | 25        |
| 32    | Ranikhet                                  | 27                   | 11             | 1254                   | 9245                    | 9245             | 598373                             | 65        | 19253871                           | 2083        | 387                    | 9245             | 187599                             | 20        |
| 33    | Pithoragarh                               | 31                   | 11             | 986                    | 1189                    | 902              | 32704                              | 28        | 1130550                            | 951         | 632                    | 902              | 19498                              | 16        |
| 34    | Dharchula                                 | 19                   | 11             | 331                    | 19791                   | 19842            | 378306                             | 19        | 74367022                           | 3758        | 478                    | 19842            | 544232                             | 27        |
| 35    | Champawat                                 | 18                   | 11             | 247                    | 22623                   | 24981            | 353492                             | 16        | 104362372                          | 4613        | 161                    | 24981            | 199741                             | 9         |
|       | <b>UPCL</b>                               | <b>929</b>           | <b>11</b>      | <b>36032</b>           | <b>1685914</b>          | <b>1327897</b>   | <b>59030770</b>                    | <b>35</b> | <b>2708970218</b>                  | <b>1607</b> | <b>12225</b>           | <b>1338965</b>   | <b>16732461</b>                    | <b>10</b> |