

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(भारत सरकार का उद्यम)

उत्तर क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI186882

Power Supply Position in Northern Region for 29.07.2018

Date of Reporting : 30.07.2018



I. Regional Availability/Demand:

| Evening Peak (20:00 Hrs) MW |          |             |            | Off Peak (03:00 Hrs) MW |          |             |            | Day Energy (Net MU) |          |
|-----------------------------|----------|-------------|------------|-------------------------|----------|-------------|------------|---------------------|----------|
| Demand Met                  | Shortage | Requirement | Freq* (Hz) | Demand Met              | Shortage | Requirement | Freq* (Hz) | Demand Met          | Shortage |
| 46955                       | 887      | 47842       | 49.80      | 43305                   | 216      | 43521       | 50.05      | 1059.55             | 10.25    |

\* Half hourly (two 15 minutes block-one block each before and after the designated time) average frequency

II. A. State's Load Details (At States periphery) in MUs:

| State        | State's Control Area Generation (Net MU) |              |                    |              |              |  |               | Drawal Schedule (Net MU) | Actual Drawal (Net MU) | UI (Net MU)  | Consumption (Net MU) | Shortages* (MU) |
|--------------|--|--------------|--------------------|--------------|--------------|--|---------------|--------------------------|------------------------|--------------|----------------------|-----------------|
|              | Thermal                                  | Hydro        | Gas/Naphtha/Diesel | Solar        | Wind         | Other (Biomass/Small hydro/Co-Generation etc.) | Total         |                          |                        |              |                      |                 |
| Punjab       | 52.49                                    | 16.53        | 0.00               | 5.80         | 0.00         | 2.26   | 77.08         | 136.31                   | 135.40                 | -0.91        | 212.47               | 0.00            |
| Haryana      | 14.98                                    | 0.00         | 0.00               | 0.15         | 0.00         | 0.54   | 15.67         | 135.25                   | 136.32                 | 1.07         | 151.99               | 0.00            |
| Rajasthan    | 78.31                                    | 0.00         | 3.07               | 9.63         | 34.31        | 0.22   | 125.54        | 72.22                    | 73.35                  | 1.13         | 198.89               | 0.00            |
| Delhi        | 6.58                                     | 0.00         | 4.05               | 0.00         | 0.00         | 0.00   | 10.63         | 84.67                    | 84.01                  | -0.66        | 94.64                | 0.00            |
| UP           | 111.22                                   | 16.72        | 0.00               | 1.73         | 0.00         | 2.40   | 132.06        | 167.40                   | 168.25                 | 0.85         | 300.31               | 0.00            |
| Uttarakhand  | 0.00                                     | 6.24         | 0.00               | 0.60         | 0.00         | 0.00   | 6.84          | 25.39                    | 25.44                  | 0.05         | 32.28                | 0.63            |
| HP           | 0.00                                     | 17.77        | 0.00               | 0.00         | 0.00         | 6.70   | 24.46         | -4.49                    | -0.88                  | 3.61         | 23.58                | 0.04            |
| J & K        | 0.00                                     | 25.61        | 0.00               | 0.00         | 0.00         | 0.00   | 25.61         | 19.38                    | 14.97                  | -4.41        | 40.58                | 9.59            |
| Chandigarh   | 0.00                                     | 0.00         | 0.00               | 0.00         | 0.00         | 0.00   | 0.00          | 5.62                     | 4.80                   | -0.82        | 4.80                 | 0.00            |
| <b>Total</b> | <b>263.58</b>                            | <b>82.86</b> | <b>7.12</b>        | <b>17.90</b> | <b>34.31</b> | <b>12.11</b>                                   | <b>417.88</b> | <b>641.75</b>            | <b>641.66</b>          | <b>-0.09</b> | <b>1059.55</b>       | <b>10.25</b>    |

\* Shortage furnished by the respective constituent & others include UP Co-generation and JK Diesel

II. B. State's Demand Met in MWs:

| State        | Evening Peak (20:00 Hrs) MW |            |             |                     | Off Peak (03:00 Hrs) MW |            |            |                     | Maximum Demand Met (MW) and Time(Hrs) | Shortage (MW) |            |
|--------------|-----------------------------|------------|-------------|---------------------|-------------------------|------------|------------|---------------------|---------------------------------------|---------------|------------|
|              | Demand Met                  | Shortage   | UI          | STOA/PX transaction | Demand Met              | Shortage   | UI         | STOA/PX transaction |                                       |               |            |
| Punjab       | 8695                        | 0          | -16         | 1749                | 8382                    | 0          | -126       | 2152                | 9275                                  | 22            | 0          |
| Haryana      | 7164                        | 0          | -16         | 2257                | 6244                    | 0          | 118        | 2303                | 7665                                  | 22            | 0          |
| Rajasthan    | 7633                        | 0          | -471        | 130                 | 8052                    | 0          | 265        | 298                 | 9009                                  | 24            | 0          |
| Delhi        | 4107                        | 0          | -96         | 630                 | 3665                    | 0          | 41         | 749                 | 5290                                  | 24            | 0          |
| UP           | 14698                       | 440        | 2           | 695                 | 13501                   | 0          | -106       | 2091                | 14739                                 | 1             | 0          |
| Uttarakhand  | 1681                        | 0          | 307         | 217                 | 1169                    | 0          | -20        | 89                  | 1681                                  | 20            | 0          |
| HP           | 959                         | 0          | 198         | -2015               | 886                     | 0          | 142        | -1911               | 1131                                  | 11            | 0          |
| J&K          | 1789                        | 447        | -174        | -627                | 1227                    | 216        | -301       | -1022               | 2578                                  | 24            | 455        |
| Chandigarh   | 230                         | 0          | -13         | -80                 | 179                     | 0          | -61        | -55                 | 253                                   | 22            | 0          |
| <b>Total</b> | <b>46955</b>                | <b>887</b> | <b>-277</b> | <b>2954</b>         | <b>43305</b>            | <b>216</b> | <b>-48</b> | <b>4694</b>         | <b>49774</b>                          | <b>24</b>     | <b>525</b> |

\* STOA figures are at sellers boundary & PX figures are at regional boundary. # figures may not be at simultaneous hour.

III. Regional Entities :

| A. NTPC                                 | Station/<br>Constituent          | Inst. Capacity | Declared     | Peak MW      | Off Peak MW  | Energy        | Average      | Schedule      | UI           |
|---|----------------------------------|----------------|--------------|--------------|--------------|---------------|--------------|---------------|--------------|
|   |                                  | (Effective) MW | Capacity(MW) | (Gross)      | (Gross)      | (Net MU)      | Sentout(MW)  | Net MU        | Net MU       |
|   | Singrauli STPS (6*200+2*500)     | 2000           | 1228         | 1360         | 1136         | 27.20         | 1133         | 26.39         | 0.81         |
|   | Rihand I STPS (2*500)            | 1000           | 923          | 989          | 1006         | 19.28         | 803          | 18.89         | 0.38         |
|   | Rihand II STPS (2*500)           | 1000           | 943          | 1001         | 1007         | 19.95         | 831          | 19.50         | 0.45         |
|   | Rihand III STPS (2*500)          | 1000           | 943          | 968          | 1012         | 18.88         | 787          | 17.83         | 1.05         |
|   | Dadri I STPS (4*210)             | 840            | 576          | 580          | 513          | 8.40          | 350          | 8.48          | -0.08        |
|   | Dadri II STPS (2*490)            | 980            | 929          | 830          | 798          | 15.36         | 640          | 14.61         | 0.75         |
|   | Unchahar I TPS (2*210)           | 420            | 382          | 356          | 274          | 6.16          | 257          | 6.36          | -0.20        |
|   | Unchahar II TPS (2*210)          | 420            | 191          | 188          | 154          | 3.40          | 142          | 3.60          | -0.20        |
|   | Unchahar III TPS (1*210)         | 210            | 191          | 170          | 173          | 3.13          | 131          | 3.19          | -0.06        |
|   | Unchahar IV TPS(1*500)           | 500            | 0            | 0            | 0            | 0.00          | 0            | 0.00          | 0.00         |
|   | ISTPP (Jhajjar) (3*500)          | 1500           | 1421         | 685          | 598          | 13.08         | 545          | 12.15         | 0.93         |
|   | Dadri GPS (4*130.19+2*154.51)    | 830            | 0            | 0            | 0            | 0.00          | 0            | 0.00          | 0.00         |
|   | Anta GPS (3*88.71+1*153.2)       | 419            | 0            | 0            | 0            | 0.00          | 0            | 0.00          | 0.00         |
|   | Auraya GPS (4*111.19+2*109.30)   | 663            | 0            | 94           | 93           | 2.28          | 95           | 2.21          | 0.07         |
|   | Dadri Solar(5)                   | 5              | 1            | 0            | 0            | 0.02          | 1            | 0.01          | 0.01         |
|   | Unchahar Solar(10)               | 10             | 1            | 0            | 0            | 0.01          | 0            | 0.02          | -0.01        |
|   | Singrauli Solar(15)              | 15             | 1            | 0            | 0            | 0.02          | 1            | 0.02          | 0.00         |
|   | KHEP(4*200)                      | 800            | 872          | 868          | 868          | 20.90         | 871          | 20.93         | -0.03        |
|   | <b>Sub Total (A)</b>             | <b>12612</b>   | <b>8601</b>  | <b>8089</b>  | <b>7632</b>  | <b>158</b>    | <b>6586</b>  | <b>154</b>    | <b>3.88</b>  |
| B. NPC                                  | NAPS (2*220)                     | 440            | 383          | 411          | 422          | 9.03          | 376          | 9.19          | -0.16        |
|   | RAPS- B (2*220)                  | 440            | 359          | 397          | 398          | 8.57          | 357          | 8.62          | -0.05        |
|   | RAPS- C (2*220)                  | 440            | 410          | 452          | 450          | 9.67          | 403          | 9.78          | -0.11        |
|   | <b>Sub Total (B)</b>             | <b>1320</b>    | <b>1152</b>  | <b>1260</b>  | <b>1270</b>  | <b>27.27</b>  | <b>1136</b>  | <b>27.59</b>  | <b>-0.32</b> |
| C. NHPC                                 | Chamera I HPS (3*180)            | 540            | 534          | 540          | 538          | 12.94         | 539          | 12.80         | 0.14         |
|   | Chamera II HPS (3*100)           | 300            | 297          | 304          | 307          | 7.25          | 302          | 7.12          | 0.13         |
|   | Chamera III HPS (3*77)           | 231            | 229          | 239          | 236          | 5.65          | 235          | 5.48          | 0.17         |
|   | Bairasul HPS(3*60)               | 180            | 124          | 182          | 122          | 3.00          | 125          | 2.91          | 0.09         |
|   | Salaj-HPS (6*115)                | 690            | 687          | 705          | 704          | 16.95         | 706          | 16.48         | 0.47         |
|   | Tanakpur-HPS (3*31.4)            | 94             | 0            | 0            | 0            | 0.00          | 0            | 0.00          | 0.00         |
|   | Uri-I HPS (4*120)                | 480            | 475          | 482          | 479          | 1.16          | 48           | 11.39         | -10.23       |
|   | Uri-II HPS (4*60)                | 240            | 213          | 245          | 242          | 5.15          | 215          | 5.11          | 0.04         |
|   | Dhauliganga-HPS (4*70)           | 280            | 161          | 186          | 0            | 3.15          | 131          | 3.12          | 0.03         |
|   | Dulhasti-HPS (3*130)             | 390            | 260          | 270          | 269          | 6.29          | 262          | 6.17          | 0.12         |
|   | Sewa-II HPS (3*40)               | 120            | 120          | 125          | 126          | 1.37          | 57           | 1.30          | 0.07         |
|   | Parbati 3 (4*130)                | 520            | 289          | 510          | 104          | 6.93          | 289          | 6.95          | -0.02        |
|   | Kishanganga(3*110)               | 330            | 202          | 151          | 210          | 4.88          | 203          | 4.85          | 0.03         |
|   | <b>Sub Total (C)</b>             | <b>4395</b>    | <b>3591</b>  | <b>3937</b>  | <b>3337</b>  | <b>75</b>     | <b>3113</b>  | <b>84</b>     | <b>-8.97</b> |
| D.SJVNL                                 | NJPC (6*250)                     | 1500           | 1605         | 1645         | 1628         | 38.63         | 1610         | 38.52         | 0.11         |
|   | Rampur HEP (6*68.67)             | 412            | 442          | 457          | 456          | 10.87         | 453          | 10.61         | 0.26         |
|   | <b>Sub Total (D)</b>             | <b>1912</b>    | <b>2047</b>  | <b>2102</b>  | <b>2084</b>  | <b>49.50</b>  | <b>2063</b>  | <b>49.13</b>  | <b>0.37</b>  |
| E. THDC                                 | Tehri HPS (4*250)                | 1000           | 879          | 908          | 877          | 17.49         | 729          | 17.40         | 0.09         |
|   | Koteswar HPS (4*100)             | 400            | 303          | 397          | 281          | 7.28          | 304          | 7.26          | 0.02         |
|   | <b>Sub Total (E)</b>             | <b>1400</b>    | <b>1182</b>  | <b>1305</b>  | <b>1158</b>  | <b>24.77</b>  | <b>1032</b>  | <b>24.66</b>  | <b>0.11</b>  |
| F. BBMB                                 | Bhakra HPS (2*108+3*126+5*157)   | 1379           | 659          | 1086         | 481          | 15.96         | 665          | 15.82         | 0.14         |
|   | Dehar HPS (6*165)                | 990            | 611          | 825          | 495          | 14.66         | 611          | 14.66         | 0.00         |
|   | Pong HPS (6*68)                  | 386            | 162          | 232          | 112          | 3.98          | 166          | 3.88          | 0.10         |
|   | <b>Sub Total (F)</b>             | <b>2765</b>    | <b>1432</b>  | <b>2143</b>  | <b>1088</b>  | <b>34.59</b>  | <b>1441</b>  | <b>34.36</b>  | <b>0.23</b>  |
| G. IPP(s)/JV(s)                         | Allain DuhanganHPS(IPP) (2*96)   | 192            | 0            | 201          | 231          | 4.78          | 199          | 4.78          | 0.00         |
|   | Karcham Wangtoo HPS(IPP) (4*250) | 1000           | 0            | 1100         | 1100         | 26.44         | 1102         | 26.08         | 0.36         |
|   | Malana Sta-II HPS (2*50)         | 100            | 0            | 113          | 113          | 2.68          | 112          | 2.34          | 0.34         |
|   | Shree Cement TPS (2*150)         | 300            | 0            | 129          | 68           | 3.45          | 144          | 2.26          | 1.19         |
|   | Budhil HPS(IPP) (2*35)           | 70             | 0            | 75           | 75           | 1.78          | 74           | 1.65          | 0.13         |
|   | Sani HPS (IPP) (2*50)            | 100            | 0            |              |              |               |              | 2.18          |              |
|   | <b>Sub Total (G)</b>             | <b>1762</b>    | <b>0</b>     | <b>1617</b>  | <b>1587</b>  | <b>39.13</b>  | <b>1630</b>  | <b>37.11</b>  | <b>2.02</b>  |
| <b>H. Total Regional Entities (A-G)</b> |                                  | <b>26167</b>   | <b>18003</b> | <b>20454</b> | <b>18156</b> | <b>408.04</b> | <b>17002</b> | <b>410.72</b> | <b>-2.68</b> |

| I. State Entities                     | Station   | Effective Installed Capacity (MW) | Peak MW     | Off Peak MW   | Energy(MU)    | Average(Sentout MW) |      |
|---------------------------------------|---|-----------------------------------|-------------|---------------|---------------|---------------------|------|
| Punjab                                | Guru Gobind Singh TPS (Ropar) (6*210)             | 1260                              | 160         | 160           | 3.57          | 149                 |      |
|                                       | Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)        | 460                               | 0           | 0             | 0.00          | 0                   |      |
|                                       | Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)     | 920                               | 0           | 0             | 0.00          | 0                   |      |
|                                       | Goindwal(GVK) (2*270)                             | 540                               | 246         | 246           | 5.24          | 218                 |      |
|                                       | Rajpura (2*700)                                   | 1400                              | 860         | 1020          | 21.22         | 884                 |      |
|                                       | Talwandi Saboo (3*660)                            | 1980                              | 924         | 924           | 22.46         | 936                 |      |
|                                       | <b>Thermal (Total)</b>                            | <b>6560</b>                       | <b>2190</b> | <b>2350</b>   | <b>52.49</b>  | <b>2187</b>         |      |
|                                       | Total Hydro                                       | 1000                              | 684         | 523           | 16.53         | 689                 |      |
|                                       | Wind Power  | 0                                 | 0           | 0             | 0.00          | 0                   |      |
|                                       | Biomass   | 303                               | 0           | 0             | 2.26          | 94                  |      |
|                                       | Solar   | 859                               | 0           | 0             | 5.80          | 242                 |      |
|                                       | <b>Renewable(Total)</b>                           | <b>1162</b>                       | <b>0</b>    | <b>0</b>      | <b>8.06</b>   | <b>336</b>          |      |
|                                       | <b>Total Punjab</b>                               | <b>8722</b>                       | <b>2874</b> | <b>2873</b>   | <b>77.08</b>  | <b>3211</b>         |      |
|                                       | Haryana   | Panipat TPS (2*210+2*250)         | 920         | 0             | 0             | 0.00                | 0    |
|                                       |   | DCRTPP (Yamuna nagar) (2*300)     | 600         | 230           | 235           | 5.50                | 229  |
| Faridabad GPS (NTPC)(2*137.75+1*156)  |   | 432                               | 0           | 0             | 0.00          | 0                   |      |
| RGTPP (kherda) (IPP) (2*600)          |   | 1200                              | 0           | 0             | 0.00          | 0                   |      |
| Magnum Diesel (IPP)                   |   | 25                                | 0           | 0             | 0.00          | 0                   |      |
| Jhajjar(CLP) (2*660)                  |   | 1320                              | 381         | 378           | 9.48          | 395                 |      |
| <b>Thermal (Total)</b>                |   | <b>4497</b>                       | <b>611</b>  | <b>613</b>    | <b>14.98</b>  | <b>624</b>          |      |
| Total Hydro                           |   | 62                                | 0           | 0             | 0.00          | 0                   |      |
| Wind Power                            |   | 0                                 | 0           | 0             | 0.00          | 0                   |      |
| Biomass                               |   | 106                               | 0           | 0             | 0.54          | 22                  |      |
| Solar                                 |   | 50                                | 0           | 0             | 0.15          | 6                   |      |
| <b>Renewable(Total)</b>               |   | <b>156</b>                        | <b>0</b>    | <b>0</b>      | <b>0.69</b>   | <b>29</b>           |      |
| <b>Total Haryana</b>                  |   | <b>4715</b>                       | <b>611</b>  | <b>613</b>    | <b>15.67</b>  | <b>653</b>          |      |
| Rajasthan                             |   | kota TPS (2*110+2*195+3*210)      | 1240        | 286           | 310           | 7.38                | 308  |
|                                       |   | suratgarh TPS (6*250)             | 1500        | 195           | 179           | 4.24                | 176  |
|                                       | Chabra TPS (4*250)                                | 1000                              | 851         | 799           | 18.48         | 770                 |      |
|                                       | Chabra TPS (1*660)                                | 660                               | 0           | 0             | 0.00          | 0                   |      |
|                                       | Dholpur GPS (3*110)                               | 330                               | 0           | 0             | 0.00          | 0                   |      |
|                                       | Ramgarh GPS(1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50) | 271                               | 132         | 129           | 3.07          | 128                 |      |
|                                       | RAPS A (NPC) (1*100+1*200)                        | 300                               | 0           | 0             | 0.00          | 0                   |      |
|                                       | Barsingsar (NLC) (2*125)                          | 250                               | 0           | 0             | 0.00          | 0                   |      |
|                                       | Giral LTPS (2*125)                                | 250                               | 0           | 0             | 0.00          | 0                   |      |
|                                       | Rajwest LTPS (IPP) (8*135)                        | 1080                              | 783         | 446           | 15.07         | 628                 |      |
|                                       | VS LIGNITE LTPS (IPP) (1*135)                     | 135                               | 0           | 0             | 0.00          | 0                   |      |
|                                       | Kalisindh Thermal(2*600)                          | 1200                              | 453         | 416           | 10.35         | 431                 |      |
|                                       | Kawai(Adani) (2*660)                              | 1320                              | 1081        | 862           | 22.79         | 950                 |      |
|                                       | <b>Thermal (Total)</b>                            | <b>9536</b>                       | <b>3781</b> | <b>3141</b>   | <b>81.38</b>  | <b>3391</b>         |      |
|                                       | Total Hydro                                       | 550                               | 0           | 0             | 0.00          | 0                   |      |
|                                       | Wind power  | 4292                              | 1105        | 1853          | 34.31         | 1430                |      |
|                                       | Biomass   | 102                               | 7           | 7             | 0.22          | 9                   |      |
|                                       | Solar   | 1995                              | 24          | 0             | 9.63          | 401                 |      |
|                                       | Renewable/Others (Total)                          | 6389                              | 1136        | 1860          | 44.16         | 1840                |      |
|                                       | <b>Total Rajasthan</b>                            | <b>16475</b>                      | <b>4917</b> | <b>5001</b>   | <b>125.54</b> | <b>5231</b>         |      |
|                                       | UP  | Anpara TPS (3*210+2*500)          | 1630        | 1309          | 1156          | 26.51               | 1105 |
|                                       |   | Obra TPS (2*50+2*94+5*200)        | 1194        | 510           | 343           | 9.03                | 376  |
|                                       |   | Paricha TPS (2*110+2*220+2*250)   | 1160        | 813           | 468           | 12.99               | 541  |
|                                       |   | Panki TPS (2*105)                 | 210         | 0             | 0             | 0.00                | 0    |
|                                       |   | Harduaganj TPS (1*60+1*105+2*250) | 665         | 450           | 251           | 7.31                | 305  |
| Tanda TPS (NTPC) (4*110)              |   | 440                               | 279         | 216           | 5.00          | 208                 |      |
| Roza TPS (IPP) (4*300)                |   | 1200                              | 0           | 0             | 0.00          | 0                   |      |
| Anpara-C (IPP) (2*600)                |   | 1200                              | 1101        | 911           | 19.78         | 824                 |      |
| Bajaj Energy Pvt.Ltd(IPP) TPS (10*45) |   | 450                               | 0           | 0             | 0.00          | 0                   |      |
| Anpara-D(2*500)                       |   | 1000                              | 949         | 936           | 21.14         | 881                 |      |
| Lalitpur TPS(3*660)                   |   | 1980                              | 622         | 351           | 9.46          | 394                 |      |
| Bara(3*660)                           |   | 1980                              | 0           | 0             | 0.00          | 0                   |      |
| <b>Thermal (Total)</b>                |   | <b>13109</b>                      | <b>6033</b> | <b>4632</b>   | <b>111.22</b> | <b>4634</b>         |      |
| Vishnupurayag HPS (IPP)(4*110)        |   | 440                               | 435         | 435           | 10.47         | 436                 |      |
| Alaknanda(4*82.5)                     |   | 330                               | 342         | 220           | 4.02          | 168                 |      |
| Other Hydro                           |   | 527                               | 275         | 63            | 2.23          | 93                  |      |
| Cogeneration                          |   | 1360                              | 100         | 100           | 2.40          | 100                 |      |
| Wind Power                            |   | 0                                 | 0           | 0             | 0.00          | 0                   |      |
| Biomass                               | 26  | 0                                 | 0           | 0.00          | 0             |                     |      |
| Solar                                 | 472   | 0                                 | 0           | 1.73          | 72            |                     |      |
| <b>Renewable(Total)</b>               | <b>498</b>  | <b>0</b>                          | <b>0</b>    | <b>1.73</b>   | <b>72</b>     |                     |      |
| <b>Total UP</b>                       | <b>16264</b>                                      | <b>7185</b>                       | <b>5450</b> | <b>132.06</b> | <b>5503</b>   |                     |      |
| Uttarakhand                           | Other Hydro                                       | 1250                              | 366         | 98            | 6.24          | 260                 |      |
|                                       | Total Gas   | 450                               | 0           | 0             | 0.00          | 0                   |      |
|                                       | Wind Power  | 0                                 | 0           | 0             | 0.00          | 0                   |      |
|                                       | Biomass   | 127                               | 0           | 0             | 0.00          | 0                   |      |
|                                       | Solar   | 100                               | 0           | 0             | 0.60          | 25                  |      |
|                                       | Small Hydro (< 25 MW)                             | 180                               | 0           | 0             | 0.00          | 0                   |      |
|                                       | <b>Renewable(Total)</b>                           | <b>407</b>                        | <b>0</b>    | <b>0</b>      | <b>0.60</b>   | <b>25</b>           |      |
|                                       | <b>Total Uttarakhand</b>                          | <b>2107</b>                       | <b>366</b>  | <b>98</b>     | <b>6.84</b>   | <b>285</b>          |      |
| Delhi                                 | Rajghat TPS (2*67.5)                              | 135                               | 0           | 0             | 0.00          | 0                   |      |
|                                       | Delhi Gas Turbine (6x30 + 3x34)                   | 282                               | 32          | 33            | 0.77          | 32                  |      |
|                                       | Pragati Gas Turbine (2x104+ 1x122)                | 330                               | 145         | 151           | 3.27          | 136                 |      |
|                                       | Rithala GPS (3*36)                                | 95                                | 0           | 0             | 0.00          | 0                   |      |
|                                       | Bawana GPS (4*216+2*253)                          | 1370                              | 0           | 0             | 0.00          | 0                   |      |
|                                       | Badarpur TPS (NTPC) (3*95+2*210)                  | 705                               | 303         | 304           | 6.58          | 274                 |      |
|                                       | <b>Thermal (Total)</b>                            | <b>2917</b>                       | <b>480</b>  | <b>488</b>    | <b>10.63</b>  | <b>443</b>          |      |
|                                       | Wind Power  | 0                                 | 0           | 0             | 0.00          | 0                   |      |
|                                       | Biomass   | 16                                | 0           | 0             | 0.00          | 0                   |      |
|                                       | Solar   | 2                                 | 0           | 0             | 0.00          | 0                   |      |
|                                       | <b>Renewable(Total)</b>                           | <b>18</b>                         | <b>0</b>    | <b>0</b>      | <b>0.00</b>   | <b>0</b>            |      |
| <b>Total Delhi</b>                    | <b>2935</b>                                       | <b>480</b>                        | <b>488</b>  | <b>10.63</b>  | <b>443</b>    |                     |      |

|   |                         |  |                 |               |                |              |     |
|---|-------------------------|--|-----------------|---------------|----------------|--------------|-----|
| HP  | Baspa HPS (IPP) (3*100) | 300  | 322             | 0             | 6.54           | 272          |     |
|   | Malana HPS (IPP) (2*43) | 86   | 107             | 105           | 2.52           | 105          |     |
|   | Other Hydro (>25MW)     | 372  | 408             | 338           | 8.71           | 363          |     |
|   | Wind Power              | 0  | 0               | 0             | 0.00           | 0            |     |
|   | Biomass                 | 0  | 0               | 0             | 0.00           | 0            |     |
|   | Solar                   | 0  | 0               | 0             | 0.00           | 0            |     |
|   | Small Hydro (< 25 MW)   | 486  | 355             | 246           | 6.70           | 279          |     |
|   | <b>Renewable(Total)</b> | <b>486</b>                                   | <b>355</b>      | <b>246</b>    | <b>6.70</b>    | <b>279</b>   |     |
|   | <b>Total HP</b>         | <b>1244</b>                                  | <b>1192</b>     | <b>689</b>    | <b>24.46</b>   | <b>1019</b>  |     |
|   | J & K                   | Baglihar HPS (IPP) (3*150+3*150)             | 900             | 883           | 883            | 21.19        | 883 |
|   |                         | Other Hydro/IPP(including 98 MW Small Hydro) | 308             | 190           | 190            | 4.42         | 184 |
| Gas/Diesel/Others   |                         | 0  | 0               | 0             | 0.00           | 0            |     |
| Wind Power  |                         | 0  | 0               | 0             | 0.00           | 0            |     |
| Biomass   |                         | 0  | 0               | 0             | 0.00           | 0            |     |
| Solar   |                         | 0  | 0               | 0             | 0.00           | 0            |     |
| Small Hydro (< 25 MW)Included in Other Hydro Above                |                         | 98   | 0               | 0             | 0.00           | 0            |     |
| <b>Renewable(Total)</b>   |                         | <b>98</b>                                    | <b>0</b>        | <b>0</b>      | <b>0.00</b>    | <b>0</b>     |     |
| <b>Total J &amp; K</b>  |                         | <b>1208</b>                                  | <b>1073</b>     | <b>1073</b>   | <b>25.61</b>   | <b>1067</b>  |     |
| <b>Total State Control Area Generation</b>                        |                         | <b>53670</b>                                 | <b>18698</b>    | <b>16285</b>  | <b>417.88</b>  | <b>17412</b> |     |
| <b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b> |                         | <b>14050</b>                                 | <b>11050.66</b> | <b>246.91</b> | <b>10288</b>   |              |     |
| <b>Total Regional Availability(Gross)</b>                         |                         | <b>79837</b>                                 | <b>53202</b>    | <b>45491</b>  | <b>1072.84</b> | <b>44701</b> |     |

**IV. Total Hydro Generation:**

|                                 |              |              |              |               |              |
|---------------------------------|--------------|--------------|--------------|---------------|--------------|
| <b>Regional Entities Hydro</b>  | <b>12564</b> | <b>11769</b> | <b>9978</b>  | <b>240.16</b> | <b>9933</b>  |
| <b>State Control Area Hydro</b> | <b>7468</b>  | <b>4367</b>  | <b>3101</b>  | <b>82.86</b>  | <b>3757</b>  |
| <b>Total Regional Hydro</b>     | <b>20032</b> | <b>16137</b> | <b>13079</b> | <b>323.02</b> | <b>13689</b> |

**V. Total Renewable Generation:**

|                                     |             |             |             |              |             |
|-------------------------------------|-------------|-------------|-------------|--------------|-------------|
| <b>Regional Entities Renewable</b>  | <b>30</b>   | <b>0</b>    | <b>0</b>    | <b>0.05</b>  | <b>2</b>    |
| <b>State Control Area Renewable</b> | <b>9214</b> | <b>1491</b> | <b>2106</b> | <b>61.92</b> | <b>2580</b> |
| <b>Total Regional Renewable</b>     | <b>9244</b> | <b>1491</b> | <b>2106</b> | <b>61.97</b> | <b>2582</b> |

**VI(A). Inter Regional Exchange [Import (+ve)/Export (-ve)] [Linkwise]**

| Element                                  | Peak(20:00 Hrs)<br>MW | Diff Peak(03:00 Hrs)<br>MW | Maximum Interchange (MW) |        | Energy (MU)   |              | Net Energy<br>MU |
|--|-----------------------|----------------------------|--------------------------|--------|---------------|--------------|------------------|
|  |                       |                            | Import                   | Export | Import        | Export       |                  |
| Vindhychal(HVDC B/B)                     | -250                  | -250                       | 0                        | 250    | 0.00          | 6.04         | -6.04            |
| 765 KV Gwalior-Agra (D/C)                | 2431                  | 2005                       | 2636                     | 0      | 47.86         | 0.00         | 47.86            |
| 400 KV Zerdha-Kankroli                   | 119                   | -57                        | 178                      | 162    | 0.28          | 0.00         | 0.28             |
| 400 KV Zerdha-Bhinmal                    | 118                   | -70                        | 172                      | 134    | 0.54          | 0.00         | 0.54             |
| 220 KV Auraiya-Malanpur                  | 3                     | -2                         | 0                        | 74     | 0.00          | 0.10         | -0.10            |
| 220 KV Badod-Kota/Morak                  | 109                   | 226                        | 120                      | 0      | 2.73          | 0.00         | 2.73             |
| Mundra-Mohindergarhi(HVDC Bipole)        | 700                   | 700                        | 703                      | 0      | 16.99         | 0.00         | 16.99            |
| 400 KV RAPPC-Sujalpur                    | 344                   | 238                        | 404                      | 0      | 6.07          | 0.00         | 6.07             |
| 400 KV Vindhychal-Rihand                 | -952                  | -965                       | 0                        | 965    | 0.00          | 18.97        | -18.97           |
| 765 KV Phagt-Gwalior (D/C)               | 1292                  | 1165                       | 771                      | 0      | 29.59         | 0.00         | 29.59            |
| +/- 800 KV HVDC Champa-Kurushetra        | 2500                  | 800                        | 800                      | 0      | 18.64         | 0            | 18.64            |
| 765KV Orai-Jabalpur                      | 1341                  | 973                        | 1517                     | 0      | 23.54         | 0            | 23.54            |
| 765KV Orai-Satna                         | 1735                  | 1662                       | 1763                     | 0      | 39.13         | 0            | 39.13            |
| 765KV Orai-Gwalior                       | 435                   | 347                        | 0                        | 454    | 0.00          | 9            | -8.68            |
| <b>Sub Total WR</b>                      | <b>9924</b>           | <b>6773</b>                |                          |        | <b>185.38</b> | <b>33.78</b> | <b>151.59</b>    |
| 400 kV Sasaram - Varanasi                | 82                    | 83                         | 90                       | 0      | 1.76          | 0.00         | 1.76             |
| 400 kV Sasaram - Allahabad               | 127                   | 62                         | 103                      | 0      | 1.77          | 0.00         | 1.77             |
| 400 kV MZP- GKP (D/C)                    | 668                   | 774                        | 917                      | 0      | 17.00         | 0.00         | 17.00            |
| 400 KV Patna-Balia(D/C) X 2              | 823                   | 1003                       | 1143                     | 0      | 19.84         | 0.00         | 19.84            |
| 400 KV B'Sharif-Balia (D/C)              | 309                   | 358                        | 429                      | 0      | 8.27          | 0.00         | 8.27             |
| 765 KV Gaya-Balia                        | 410                   | 316                        | 423                      | 0      | 7.53          | 0.00         | 7.53             |
| 765 KV Gaya-Varanasi (D/C)               | 562                   | 427                        | 692                      | 0      | 10.49         | 0.00         | 10.49            |
| 220 KV Pusaui-Sahupuri                   | 127                   | 131                        | 135                      | 0      | 2.86          | 0.00         | 2.86             |
| 132 KV Knasa-Sahupuri                    | 0                     | 0                          | 0                        | 0      | 0.48          | 0.00         | 0.48             |
| 132 KV Son Ngr-Rihand                    | 22                    | 15                         | 0                        | 30     | 0.00          | 0.46         | -0.46            |
| 132 KV Garhwa-Rihand                     | 0                     | 0                          | 0                        | 0      | 0.00          | 0.00         | 0.00             |
| 765 KV Sasaram - Fatehpur                | 39                    | 12                         | 155                      | 78     | 0.96          | 0.00         | 0.96             |
| 400 KV Mothari -GKP (D/C)                | -187                  | -135                       | 0                        | 243    | 0.00          | 3.43         | -3.43            |
| 400 kV B'Sharif - Varanasi (D/C)         | 144                   | 232                        | 346                      | 0      | 5.05          | 0.00         | 5.05             |
| +/- 800 KV HVDC Alipurduar-Agra          | 400                   | 400                        | 400                      | 0      | 9.35          | 0.00         | 9.35             |
| <b>Sub Total ER</b>                      | <b>3526</b>           | <b>3678</b>                |                          |        | <b>85.36</b>  | <b>3.89</b>  | <b>81.47</b>     |
| +/- 800 KV HVDC Biswanath-Charialli-Agra | 600                   | 600                        | 600                      | 0.00   | 13.85         | 0.00         | 13.85            |
| <b>Sub Total NER</b>                     | <b>600</b>            | <b>600</b>                 |                          |        | <b>13.85</b>  | <b>0.00</b>  | <b>13.85</b>     |
| <b>Total IR Exch</b>                     | <b>14050</b>          | <b>11051</b>               |                          |        | <b>284.58</b> | <b>37.68</b> | <b>246.91</b>    |

**VI(B). Inter Regional Schedule & Actual Exchanges [Import (+ve)/Export (-ve)] [Corridor wise]**

| ER    | ISGS/LT Schedule (MU) |       | Bilateral Schedule (MU) |            | Power Exchange Shdl (MU) |            | Wheeling (MU) |            |
|-------|-----------------------|-------|-------------------------|------------|--------------------------|------------|---------------|------------|
|       | Bhutan                | Total | Through ER              | Through WR | Through ER               | Through WR | Through ER    | Through WR |
| 43.37 | 3.71                  | 47.08 | 32.08                   | 61.89      | -6.15                    | 1.86       | 0.00          | 0.00       |

| Total IR Schedule (MU) |                         |        | Total IR Actual (MU)      |            |        | Net IR UI (MU)             |            |        |
|------------------------|-------------------------|--------|---------------------------|------------|--------|----------------------------|------------|--------|
| Through ER             | Through WR Inclds Mndra | Total  | Through ER(including NER) | Through WR | Total  | Through ER (including NER) | Through WR | Total  |
| 69.30                  | 191.11                  | 260.41 | 95.32                     | 151.59     | 246.91 | 26.02                      | -39.52     | -13.50 |

**VI(C). Inter National Exchange with Nepal [Import (+ve)/Export (-ve)] [Linkwise]**

| Element                         | Peak(20:00 Hrs)<br>MW | Diff Peak(03:00 Hrs)<br>MW | Maximum Interchange (MW) |        | Energy (MU) |        | Net Energy<br>MU |
|---------------------------------|-----------------------|----------------------------|--------------------------|--------|-------------|--------|------------------|
|                                 |                       |                            | Import                   | Export | Import      | Export |                  |
| 132 KV Tanakpur - Mahendarnagar | -21                   | -16                        | 0                        | 21     | 0           | 0      | -0.32            |

**VII. Frequency Profile <----- % of Time Frequency ----->**

| <49.2 | <49.7 | <49.8 | <49.9 | <50.0 | 49.9-50.05 | 50.05-50.10 | 50.10-50.20 | >50.20 | >50.50 |
|-------|-------|-------|-------|-------|------------|-------------|-------------|--------|--------|
| 0.00  | 0.00  | 0.60  | 6.90  | 59.00 | 83.90      | 8.20        | 1.30        | 0.00   | 0.00   |

| <----- Frequency (Hz) -----> |      |         |       | Average<br>Frequency | Frequency<br>Variation | Std. Dev. | Frequency in 15 Min Block |      | Freq Dev<br>Index (% of<br>Time) |
|------------------------------|------|---------|-------|----------------------|------------------------|-----------|---------------------------|------|----------------------------------|
| Maximum                      |      | Minimum |       |                      |                        |           | MAX                       | MIN  |                                  |
| Freq                         | Time | Freq    | Time  | Hz                   | Index                  |           | (Hz)                      | (Hz) |                                  |
| 50.18                        | 6.01 | 49.74   | 22.20 | 49.98                | 0.034                  | 0.056     | 0.00                      | 0.00 | 16.10                            |

## VIII(A). Voltage profile 400 kV

| Station           | Voltage Level (kV) | Maximum     |       | Minimum      |       | Voltage (in % of Time) |         |         |         | Voltage Deviation Index |
|-------------------|--------------------|-------------|-------|--------------|-------|------------------------|---------|---------|---------|-------------------------|
|                   |                    | Voltage(KV) | Time  | Voltage (KV) | Time  | <380 kV                | <390 kV | >420 kV | >430 kV |                         |
| Rihand            | 400                | 404         | 4:01  | 400          | 0:04  | 0.0                    | 0.0     | 0.0     | 0.0     | 0.0                     |
| Gorakhpur         | 400                | 421         | 16:01 | 394          | 19:19 | 0.0                    | 0.0     | 0.0     | 0.0     | 0.0                     |
| Bareilly(PG)400kV | 400                | 412         | 16:02 | 382          | 5:43  | 0.0                    | 0.0     | 0.0     | 0.0     | 0.0                     |
| Kanpur            | 400                | 417         | 16:03 | 402          | 0:38  | 0.0                    | 0.0     | 0.0     | 0.0     | 0.0                     |
| Dadri             | 400                | 411         | 7:01  | 398          | 22:29 | 0.0                    | 0.0     | 0.0     | 0.0     | 0.0                     |
| Ballabgarh        | 400                | 411         | 7:04  | 396          | 22:14 | 0.0                    | 0.0     | 0.0     | 0.0     | 0.0                     |
| Bawana            | 400                | 409         | 16:02 | 397          | 0:17  | 0.0                    | 0.0     | 0.0     | 0.0     | 0.0                     |
| Bassi             | 400                | 417         | 16:02 | 399          | 22:17 | 0.0                    | 0.0     | 0.0     | 0.0     | 0.0                     |
| Hissar            | 400                | 407         | 16:04 | 394          | 0:07  | 0.0                    | 0.0     | 0.0     | 0.0     | 0.0                     |
| Moga              | 400                | 403         | 9:41  | 393          | 0:17  | 0.0                    | 0.0     | 0.0     | 0.0     | 0.0                     |
| Abdullapur        | 400                | 408         | 8:01  | 398          | 0:12  | 0.0                    | 0.0     | 0.0     | 0.0     | 0.0                     |
| Nalagarh          | 400                | 408         | 8:06  | 402          | 0:14  | 0.0                    | 0.0     | 0.0     | 0.0     | 0.0                     |
| Kishenpur         | 400                | 407         | 13:06 | 400          | 21:16 | 0.0                    | 0.0     | 0.0     | 0.0     | 0.0                     |
| Wagoora           | 400                | 403         | 4:44  | 388          | 20:28 | 0.0                    | 0.0     | 0.0     | 0.0     | 0.0                     |
| Amritsar          | 400                | 405         | 8:01  | 396          | 0:03  | 0.0                    | 0.0     | 0.0     | 0.0     | 0.0                     |
| Kashipur          | 400                | 402         | 0:00  | 402          | 0:00  | 0.0                    | 0.0     | 0.0     | 0.0     | 0.0                     |
| Hamirpur          | 400                | 405         | 8:30  | 398          | 0:03  | 0.0                    | 0.0     | 0.0     | 0.0     | 0.0                     |
| Rishikesh         | 400                | 404         | 4:06  | 391          | 23:15 | 0.0                    | 0.0     | 0.0     | 0.0     | 0.0                     |

## VIII(B). Voltage profile 765 kV

| Station         | Voltage Level (kV) | Maximum     |       | Minimum      |       | Voltage (in % of Time) |         |         |         | Voltage Deviation Index |
|-----------------|--------------------|-------------|-------|--------------|-------|------------------------|---------|---------|---------|-------------------------|
|                 |                    | Voltage(KV) | Time  | Voltage (KV) | Time  | <728 kV                | <742 kV | >800 kV | >820 kV |                         |
| Fatehpur        | 765                | 778         | 16:04 | 751          | 0:38  | 0.0                    | 0.0     | 0.0     | 0.0     | 0.0                     |
| Balia           | 765                | 790         | 16:02 | 756          | 19:19 | 0.0                    | 0.0     | 0.0     | 0.0     | 0.0                     |
| Moga            | 765                | 784         | 10:01 | 756          | 0:17  | 0.0                    | 0.0     | 0.0     | 0.0     | 0.0                     |
| Agra            | 765                | 791         | 16:02 | 760          | 22:32 | 0.0                    | 0.0     | 0.0     | 0.0     | 0.0                     |
| Bhiwani         | 765                | 792         | 16:00 | 767          | 0:11  | 0.0                    | 0.0     | 0.0     | 0.0     | 0.0                     |
| Unnao           | 765                | 771         | 16:04 | 741          | 22:30 | 0.0                    | 0.7     | 0.0     | 0.0     | 0.0                     |
| Lucknow         | 765                | 794         | 16:02 | 758          | 23:07 | 0.0                    | 0.0     | 0.0     | 0.0     | 0.0                     |
| Meerut          | 765                | 798         | 16:02 | 767          | 23:38 | 0.0                    | 0.0     | 0.0     | 0.0     | 0.0                     |
| Jhatikara       | 765                | 792         | 16:02 | 759          | 22:21 | 0.0                    | 0.0     | 0.0     | 0.0     | 0.0                     |
| Bareilly 765 kV | 765                | 789         | 16:02 | 754          | 23:08 | 0.0                    | 0.0     | 0.0     | 0.0     | 0.0                     |
| Anta            | 765                | 795         | 4:12  | 775          | 22:20 | 0.0                    | 0.0     | 0.0     | 0.0     | 0.0                     |
| Phagi           | 765                | 795         | 15:57 | 770          | 21:47 | 0.0                    | 0.0     | 0.0     | 0.0     | 0.0                     |

Note: '0' in Max / Min Col -&gt; Telemetry Outage

## IX. Reservoir Parameters:

| Name of Reservoir | Parameters |          | Present Parameters |             | Last Year |             | Last day                   |                           |
|-------------------|------------|----------|--------------------|-------------|-----------|-------------|----------------------------|---------------------------|
|                   | FRL (m)    | MDDL (m) | Level (m)          | Energy (MU) | Level (m) | Energy (MU) | Inflow (m <sup>3</sup> /s) | Usage (m <sup>3</sup> /s) |
| Bhakra            | 513.59     | 445.62   | 476.36             | 381.25      | 494.50    | 880.64      | 1535.28                    | 561.41                    |
| Pong              | 426.72     | 384.05   | 399.26             | 203.01      | 409.16    | 464.36      | 1019.77                    | 286.91                    |
| Tehri             | 829.79     | 740.04   | 793.40             | 504.43      | 793.75    | 509.80      | 934.00                     | 447.00                    |
| Koteswar          | 612.50     | 598.50   | 610.26             | 4.69        | 609.72    | 4.44        | 447.00                     | 481.40                    |
| Chamera-I         | 760.00     | 748.75   | 758.23             | 0.00        | 0.00      | 0.00        | 403.02                     | 353.31                    |
| Rihand            | 268.22     | 252.98   | 0.00               | 0.00        | 0.00      | 0.00        | 0.00                       | 0.00                      |
| RPS               | 352.80     | 343.81   | 0.00               | 0.00        | 0.00      | 0.00        | 0.00                       | 0.00                      |
| Jawahar Sagar     | 298.70     | 295.78   | 0.00               | 0.00        | 0.00      | 0.00        | 0.00                       | 0.00                      |
| RSD               | 527.91     | 487.91   | 509.66             | 4.00        | 522.25    | 7.16        | 382.58                     | 207.03                    |

\* NA: Not Available

## X(A). Short-Term Open Access Details:

| State        | Off- Peak Hours (03:00 Hrs) |            |           | Peak Hours (20:00 Hrs) |              |           | Day Energy (MU) |                 |               |
|--------------|-----------------------------|------------|-----------|------------------------|--------------|-----------|-----------------|-----------------|---------------|
|              | Bilateral (MW)              | IEX (MW)   | PXIL (MW) | Bilateral (MW)         | IEX (MW)     | PXIL (MW) | Bilateral (MU)  | IEX / PXIL (MU) | Total (MU)    |
| Punjab       | 2152                        | 0          | 0         | 2150                   | -402         | 0         | 51.63           | -0.80           | 50.83         |
| Delhi        | 1075                        | -326       | 0         | 961                    | -332         | 0         | 24.01           | -5.38           | 18.63         |
| Haryana      | 2341                        | -38        | 0         | 2255                   | 2            | 0         | 47.96           | -1.99           | 45.97         |
| HP           | -1630                       | -281       | 0         | -1675                  | -340         | 0         | -37.06          | -6.87           | -43.93        |
| J&K          | -1150                       | 128        | 0         | -1151                  | 524          | 0         | -27.61          | 10.91           | -16.70        |
| CHD          | 0                           | -55        | 0         | 0                      | -80          | 0         | 0.00            | -1.33           | -1.33         |
| Rajasthan    | 63                          | 235        | 0         | -37                    | 168          | 0         | 1.00            | 4.64            | 5.64          |
| UP           | 2091                        | 0          | 0         | 1710                   | -1015        | 0         | 42.97           | -4.27           | 38.70         |
| Uttarakhand  | -153                        | 241        | 0         | -205                   | 422          | 0         | -3.92           | 7.68            | 3.76          |
| <b>Total</b> | <b>4788</b>                 | <b>-94</b> | <b>0</b>  | <b>4008</b>            | <b>-1054</b> | <b>0</b>  | <b>98.98</b>    | <b>2.59</b>     | <b>101.57</b> |

## X(B). Short-Term Open Access Details:

| State       | Bilateral (MW) |         | IEX (MW) |         | PXIL (MW) |         |
|-------------|----------------|---------|----------|---------|-----------|---------|
|             | Maximum        | Minimum | Maximum  | Minimum | Maximum   | Minimum |
| Punjab      | 2152           | 2144    | 0        | -402    | 0         | 0       |
| Delhi       | 1256           | 860     | 75       | -686    | 0         | 0       |
| Haryana     | 2385           | 1763    | 161      | -968    | 0         | 0       |
| HP          | -1436          | -1878   | -237     | -340    | 0         | 0       |
| J&K         | -1150          | -1152   | 642      | 79      | 0         | 0       |
| CHD         | 0              | 0       | -10      | -80     | 0         | 0       |
| Rajasthan   | 63             | -38     | 238      | -471    | 0         | 0       |
| UP          | 2115           | 1688    | 0        | -1015   | 0         | 0       |
| Uttarakhand | -153           | -205    | 455      | 241     | 0         | 0       |

## XI. System Reliability Indices(Violation of TTC and ATC):

(i)%age of times N-1 Criteria was violated in the inter - regional corridors

|              |       |
|--------------|-------|
| WR           | 0.00% |
| ER           | 0.00% |
| Simultaneous | 0.00% |

(ii)%age of times ATC violated on the inter-regional corridors

|              |       |
|--------------|-------|
| WR           | 0.00% |
| ER           | 0.00% |
| Simultaneous | 0.00% |

(iii)%age of times Angular Difference on Important Buses was beyond permissible limits(40 deg.)

|                |       |
|----------------|-------|
| Rihand - Dadri | 0.00% |
|----------------|-------|

**XII. Zero Crossing Violations**

| State       | No. of violations(Maximum 8 in a day) | Maximum number of continuous blocks without sign change |
|-------------|---------------------------------------|---|
| Punjab      | 2                                     | 15  |
| Haryana     | 1                                     | 13  |
| Rajasthan   | 4                                     | 30  |
| Delhi       | 4                                     | 33  |
| UP          | 1                                     | 16  |
| Uttarakhand | 3                                     | 32  |
| HP          | 1                                     | 14  |
| J & K       | 4                                     | 28  |
| Chandigarh  | 5                                     | 52  |

**XIII. System Constraints:**

**XIV. Grid Disturbance / Any Other Significant Event:**

**XV. Weather Conditions For 29.07.2018 :**

**XVI. Synchronisation of new generating units :**

**XVII. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / substation :**

0.00

**XVIII. Tripping of lines in pooling stations :**

**XIX. Complete generation loss in a generating station :**

Note: Data (regarding drawal, generation, shortage, inter-regional flows and reservoir levels) of the constituents filled in the report are as per last furnished data by the respective state/constituent to NRLDC.

Report for : 29.07.2018

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER