

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 23.07.2015  
Date of Reporting : 24.07.2015

### 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 |
| 45333                       | 2488     | 47821       | 50.04      | 42826                   | 3029     | 45855       | 50.08      | 1042.9              | 64.88    |

\* 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        | Renewable/others \$ | Total         |                          |                        |             |                      |                 |
| Punjab       | 75.66                                    | 18.89        |                     | 94.56         | 121.75                   | 121.14                 | -0.61       | 215.70               | 0.00            |
| Haryana      | 42.32                                    | 0.64         |                     | 42.97         | 126.01                   | 125.90                 | -0.10       | 168.87               | 0.03            |
| Rajasthan    | 107.82                                   | 0.00         | 2.09                | 109.91        | 56.75                    | 59.04                  | 2.29        | 168.95               | 0.12            |
| Delhi        | 16.75                                    |              |                     | 16.75         | 89.26                    | 89.69                  | 0.44        | 106.45               | 0.11            |
| UP           | 126.84                                   | 12.39        |                     | 139.23        | 136.41                   | 139.71                 | 3.30        | 278.93               | 56.76           |
| Uttarakhand  |  | 22.12        |                     | 22.12         | 16.27                    | 16.94                  | 0.67        | 39.06                | 0.00            |
| HP           |  | 23.20        |                     | 23.20         | 1.53                     | 2.57                   | 1.04        | 25.77                | 0.00            |
| J & K        |  | 14.59        | 0.00                | 14.59         | 19.46                    | 18.62                  | -0.84       | 33.21                | 7.86            |
| Chandigarh   |  |              |                     | 0.00          | 6.19                     | 5.92                   | 0.27        | 5.92                 | 0.00            |
| <b>Total</b> | <b>369.40</b>                            | <b>91.84</b> | <b>2.09</b>         | <b>463.33</b> | <b>573.61</b>            | <b>579.52</b>          | <b>6.45</b> | <b>1042.85</b>       | <b>64.88</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 |             |            |                     | # Max(hourly) Demand Met of Day (MW) |
|--------------|-----------------------------|-------------|------------|---------------------|-------------------------|-------------|------------|---------------------|--------------------------------------|
|              | Demand Met                  | Shortage    | UI         | STOA/PX transaction | Demand Met              | Shortage    | UI         | STOA/PX transaction |                                      |
| Punjab       | 9520                        | 0           | -74        | 1133                | 8199                    | 0           | -198       | 1389                | 9883                                 |
| Haryana      | 7913                        | 73          | 9          | 1520                | 7126                    | 0           | 284        | 1624                | 8276                                 |
| Rajasthan    | 6892                        | 0           | 28         | -254                | 7101                    | 0           | 192        | 33                  | 7366                                 |
| Delhi        | 4542                        | 0           | 41         | 376                 | 4465                    | 0           | 312        | 202                 | 5194                                 |
| UP           | 11502                       | 1970        | 11         | 570                 | 12174                   | 2830        | 119        | 857                 | 12376                                |
| Uttarakhand  | 1878                        | 0           | 114        | 45                  | 1483                    | 0           | -27        | -57                 | 1878                                 |
| HP           | 1038                        | 0           | 12         | -1321               | 947                     | 0           | 33         | -1507               | 1200                                 |
| J&K          | 1781                        | 445         | 144        | -394                | 1129                    | 199         | -132       | -681                | 1820                                 |
| Chandigarh   | 266                         | 0           | -11        | 0                   | 202                     | 0           | -27        | 0                   | 305                                  |
| <b>Total</b> | <b>45333</b>                | <b>2488</b> | <b>274</b> | <b>1675</b>         | <b>42826</b>            | <b>3029</b> | <b>556</b> | <b>1860</b>         | <b>46709</b>                         |

\* STOA figures are at sellers boundary & PX figures are at regional boundary.

# figures may not be at simultaneous hour.

Diversity is 1.03

### III. Regional Entities :

| Entity                                  | Station/Constituent              | Inst. Capacity (Effective) MW | Declared Capacity(MW) | Peak MW (Gross) | Off Peak MW (Gross) | Energy (Net MU) | Average Sentout(MW) | Schedule Net MU | UI Net MU    |
|---|----------------------------------|-------------------------------|-----------------------|-----------------|---------------------|-----------------|---------------------|-----------------|--------------|
|   |                                  |                               |                       |                 |                     |                 |                     |                 |              |
| A. NTPC                                 | Singrauli STPS (5*200+2*500)     | 2000                          | 1784                  | 1952            | 1959                | 46.60           | 1942                | 42.45           | 4.15         |
|   | Rihand I STPS (2*500)            | 1000                          | 878                   | 957             | 953                 | 22.45           | 935                 | 20.59           | 1.85         |
|   | Rihand II STPS (2*500)           | 1000                          | 461                   | 465             | 513                 | 11.43           | 476                 | 10.71           | 0.72         |
|   | Rihand III STPS (2*500)          | 1000                          | 884                   | 915             | 1001                | 20.85           | 869                 | 20.17           | 0.68         |
|   | Dadri I STPS (4*210)             | 840                           | 800                   | 685             | 591                 | 14.74           | 614                 | 14.35           | 0.40         |
|   | Dadri II STPS (2*490)            | 980                           | 905                   | 943             | 692                 | 18.51           | 771                 | 18.89           | -0.38        |
|   | Unchahar I TPS (2*210)           | 420                           | 402                   | 435             | 347                 | 9.62            | 401                 | 9.41            | 0.20         |
|   | Unchahar II TPS (2*210)          | 420                           | 200                   | 206             | 147                 | 4.49            | 187                 | 4.50            | -0.01        |
|   | Unchahar III TPS (1*220)         | 210                           | 200                   | 200             | 152                 | 4.03            | 168                 | 4.10            | -0.07        |
|   | ISTPP (Jhajjar) (3*500)          | 1500                          | 1500                  | 937             | 607                 | 15.64           | 652                 | 16.33           | -0.68        |
|   | Dadri GPS (4*130.19+2*154.51)    | 830                           | 800                   | 272             | 281                 | 6.57            | 274                 | 6.67            | -0.11        |
|   | Anta GPS (3*88.71+1*153.2)       | 419                           | 396                   | -2              | -1                  | 0.00            | 0                   | 0.00            | 0.00         |
|   | Auraiya GPS (4*111.19+2*109.30)  | 663                           | 640                   | 0               | 0                   | 0.00            | 0                   | 0.00            | 0.00         |
|   | Dadri Solar                      | 5                             | 1                     | 0               | 0                   | 0.02            | 1                   | 0.02            | 0.00         |
|   | Unchahar Solar                   | 10                            | 3                     | 0               | 0                   | 0.01            | 1                   | 0.06            | -0.05        |
|   | Singrauli Solar                  | 15                            | 3                     | 0               | 0                   | 0.03            | 1                   | 0.07            | -0.04        |
|   | KHEP                             | 800                           | 0                     | 820             | 819                 | 20.07           | 836                 | 19.40           | 0.67         |
|   | <b>Sub Total (A)</b>             | <b>12112</b>                  | <b>9855</b>           | <b>8785</b>     | <b>8061</b>         | <b>195</b>      | <b>8127</b>         | <b>188</b>      | <b>7</b>     |
|   | B. NPC                           | NAPS (2*220)                  | 440                   | 368             | 412                 | 413             | 8.82                | 368             | 8.83         |
| RAPS- B (2*220)                         |                                  | 440                           | 387                   | 426             | 432                 | 9.42            | 392                 | 9.29            | 0.13         |
| RAPS- C (2*220)                         |                                  | 440                           | 385                   | 429             | 423                 | 9.18            | 383                 | 9.24            | -0.06        |
| <b>Sub Total (B)</b>                    |                                  | <b>1320</b>                   | <b>1140</b>           | <b>1267</b>     | <b>1268</b>         | <b>27.42</b>    | <b>1143</b>         | <b>27.36</b>    | <b>0.06</b>  |
| C. NHPC                                 | Chamera I HPS (3*180)            | 540                           | 536                   | 549             | 542                 | 13.05           | 544                 | 12.86           | 0.19         |
|   | Chamera II HPS (3*100)           | 300                           | 300                   | 302             | 303                 | 7.23            | 301                 | 7.20            | 0.03         |
|   | Chamera III HPS (3*77)           | 231                           | 229                   | 235             | 232                 | 5.57            | 232                 | 5.50            | 0.07         |
|   | Bairasuil HPS(3*60)              | 180                           | 179                   | 183             | 185                 | 4.33            | 180                 | 4.30            | 0.03         |
|   | Salal-HPS (6*115)                | 690                           | 621                   | 667             | 670                 | 15.30           | 638                 | 14.91           | 0.39         |
|   | Tanakpur-HPS (3*40)              | 94                            | 48                    | 62              | 94                  | 1.20            | 50                  | 1.15            | 0.05         |
|   | Uri-I HPS (4*120)                | 480                           | 475                   | 470             | 474                 | 11.57           | 482                 | 11.40           | 0.17         |
|   | Uri-II HPS (4*60)                | 240                           | 180                   | 182             | 183                 | 4.35            | 181                 | 4.32            | 0.03         |
|   | Dhauliganga-HPS (4*70)           | 280                           | 271                   | 288             | 286                 | 6.08            | 253                 | 6.09            | -0.01        |
|   | Dulhasti-HPS (3*130)             | 390                           | 386                   | 395             | 394                 | 9.30            | 388                 | 9.26            | 0.04         |
|   | Sewa-II HPS (3*40)               | 120                           | 119                   | 128             | 126                 | 3.00            | 125                 | 2.86            | 0.14         |
|   | Parbati 3 (4*130)                | 520                           | 69                    | 0               | 0                   | 1.60            | 67                  | 1.66            | -0.06        |
|   | <b>Sub Total (C)</b>             | <b>4065</b>                   | <b>3414</b>           | <b>3460</b>     | <b>3489</b>         | <b>83</b>       | <b>3441</b>         | <b>82</b>       | <b>1</b>     |
|   | D.SJVNL                          | NJPC (6*250)                  | 1500                  | 1605            | 1640                | 1621            | 38.72               | 1613            | 38.49        |
| Rampur HEP (6*68.67)                    |                                  | 412                           | 438                   | 441             | 446                 | 10.54           | 439                 | 10.52           | 0.02         |
| <b>Sub Total (D)</b>                    |                                  | <b>1912</b>                   | <b>2043</b>           | <b>2081</b>     | <b>2067</b>         | <b>49.26</b>    | <b>2052</b>         | <b>49.01</b>    | <b>0.25</b>  |
| E. THDC                                 | Tehri HPS (4*250)                | 1000                          | 612                   | 619             | 416                 | 8.12            | 339                 | 8.00            | 0.12         |
|   | Koteshwar HPS (4*100)            | 400                           | 138                   | 397             | 91                  | 3.31            | 138                 | 3.30            | 0.01         |
|   | <b>Sub Total (E)</b>             | <b>1400</b>                   | <b>750</b>            | <b>1016</b>     | <b>507</b>          | <b>11.44</b>    | <b>477</b>          | <b>11.30</b>    | <b>0.14</b>  |
| F. BBMB                                 | Bhakra HPS (3*108+2*126+5*157)   | 1361                          | 1427                  | 1454            | 1450                | 34.35           | 1431                | 34.25           | 0.09         |
|   | Dehar HPS (6*165)                | 990                           | 603                   | 660             | 560                 | 14.44           | 602                 | 14.46           | -0.02        |
|   | Pong HPS (6*66)                  | 396                           | 161                   | 384             | 0                   | 3.77            | 157                 | 3.86            | -0.08        |
|   | <b>Sub Total (F)</b>             | <b>2747</b>                   | <b>2190</b>           | <b>2498</b>     | <b>2010</b>         | <b>52.56</b>    | <b>2190</b>         | <b>52.57</b>    | <b>-0.01</b> |
| G. IPP(s)/JV(s)                         | ALLAIN DUHANGAN HPS(IPP) (2*96)  | 192                           | 0                     | 231             | 232                 | 5.45            | 227                 | 5.37            | 0.08         |
|   | KARCHAM WANGTOO HPS(IPP) (4*250) | 1000                          | 0                     | 1200            | 1200                | 28.63           | 1193                | 28.53           | 0.10         |
|   | Malana Stg-II HPS (2*50)         | 100                           | 0                     | 111             | 111                 | 2.28            | 95                  | 2.27            | 0.01         |
|   | Shree Cement TPS (2*150)         | 300                           | 0                     | 296             | 293                 | 6.83            | 285                 | 7.14            | -0.31        |
|   | Budhil HPS(IPP) (2*35)           | 70                            | 0                     | 71              | 74                  | 1.73            | 72                  | 1.68            | 0.06         |
|   | <b>Sub Total (G)</b>             | <b>1662</b>                   | <b>0</b>              | <b>1909</b>     | <b>1910</b>         | <b>44.92</b>    | <b>1872</b>         | <b>44.98</b>    | <b>-0.06</b> |
| <b>H. Total Regional Entities (A-G)</b> | <b>25219</b>                     | <b>19392</b>                  | <b>21016</b>          | <b>19312</b>    | <b>463.24</b>       | <b>19302</b>    | <b>454.45</b>       | <b>8.79</b>     |              |

| I. State Entities   | Station  | Effective Installed Capacity (MW) | Peak MW      | Off Peak MW  | Energy(MU)     | Average(Sent out MW) |      |
|---|--|-----------------------------------|--------------|--------------|----------------|----------------------|------|
| Punjab  | Guru Gobind Singh TPS (Ropar) (6*210)              | 1260                              | 100          | 880          | 21.50          | 896                  |      |
|   | Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)         | 460                               | 105          | 0            | 1.04           | 43                   |      |
|   | Guru Har Gobind Singh TPS(L.mbt) (2*210+2*250)     | 920                               | 709          | 664          | 15.09          | 629                  |      |
|   | Goindwal(GVK)                                      | 0                                 | 0            | 0            | 0.00           | 0                    |      |
|   | Rajpura (2*700)                                    | 1400                              | 1313         | 713          | 28.60          | 1192                 |      |
|   | Talwandi Saboo (1*660)                             | 660                               | 559          | 343          | 9.43           | 393                  |      |
|   | <b>Thermal (Total)</b>                             | <b>4700</b>                       | <b>2786</b>  | <b>2600</b>  | <b>75.66</b>   | <b>3153</b>          |      |
|   | Total Hydro  | 1000                              | 854          | 767          | 18.89          | 787                  |      |
|   | <b>Total Punjab</b>                                | <b>5700</b>                       | <b>3640</b>  | <b>3367</b>  | <b>94.56</b>   | <b>3940</b>          |      |
|   | Haryana  | Panipat TPS (4*110+2*210+2*250)   | 1367         | 647          | 218            | 10.62                | 442  |
| DCRTPP (Yamuna nagar) (2*300)                                     |  | 600                               | 539          | 448          | 11.18          | 466                  |      |
| Faridabad GPS (NTPC)  |  | 432                               | 0            | 0            | 0.00           | 0                    |      |
| RGTPP (Khedar) (IPP) (2*600)                                      |  | 1200                              | 567          | 373          | 10.43          | 435                  |      |
| Magnum Diesel (IPP)   |  | 25                                | 0            | 0            | 0.00           | 0                    |      |
| Jhajjar(CLIP) (2*660)   |  | 1320                              | 535          | 385          | 10.09          | 420                  |      |
| <b>Thermal (Total)</b>  |  | <b>4944</b>                       | <b>2288</b>  | <b>1424</b>  | <b>42.32</b>   | <b>1764</b>          |      |
| Total Hydro   |  | 62                                | 28           | 26           | 0.64           | 27                   |      |
| <b>Total Haryana</b>  |  | <b>5006</b>                       | <b>2316</b>  | <b>1450</b>  | <b>42.97</b>   | <b>1790</b>          |      |
| Rajasthan   |  | kota TPS (2*110+2*195+3*210)      | 1240         | 603          | 596            | 11.55                | 481  |
|   | suratgarh TPS (6*250)                              | 1500                              | 580          | 576          | 14.18          | 591                  |      |
|   | Chabra TPS (4*250)                                 | 1000                              | 374          | 478          | 9.98           | 416                  |      |
|   | 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                               | 188          | 192          | 4.90           | 204                  |      |
|   | RAPS A (NPC) (1*100+1*200)                         | 300                               | 151          | 153          | 3.40           | 142                  |      |
|   | Barsingar (NLC) (2*125)                            | 250                               | 94           | 94           | 2.14           | 89                   |      |
|   | Giral LTPS (2*125)                                 | 250                               | 0            | 0            | 0.00           | 0                    |      |
|   | Rajwast LTPS (IPP) (8*135)                         | 1080                              | 557          | 800          | 17.11          | 713                  |      |
|   | VS LIGNITE LTPS (IPP) (1*135)                      | 135                               | 0            | 0            | 0.00           | 0                    |      |
|   | Kalisindh Thermal(1*600)                           | 600                               | 963          | 809          | 21.23          | 885                  |      |
|   | Kawai(Adani) (2*660)                               | 1320                              | 868          | 860          | 23.33          | 972                  |      |
|   | <b>Thermal (Total)</b>                             | <b>8276</b>                       | <b>4378</b>  | <b>4558</b>  | <b>108</b>     | <b>4492</b>          |      |
|   | Total Hydro  | 550                               | 0            | 0            | 0.00           | 0                    |      |
|   | Wind power   | 3214                              | 95           | 21           | 1.68           | 70                   |      |
|   | Biomass  | 99                                | 17           | 17           | 0.42           | 17                   |      |
|   | Solar  | 730                               | 0            | 0            | 0.00           | 0                    |      |
|   | Renewable/Others (Total)                           | 4043                              | 112          | 38           | 2.09           | 87                   |      |
|   | <b>Total Rajasthan</b>                             | <b>12869</b>                      | <b>4490</b>  | <b>4596</b>  | <b>109.91</b>  | <b>4580</b>          |      |
|   | UP   | Anpara TPS (3*210+2*500)          | 1630         | 1244         | 1292           | 30.20                | 1258 |
|   |  | Obra TPS (2*50+2*94+5*200)        | 1194         | 401          | 409            | 8.80                 | 367  |
|   |  | Paricha TPS (2*110+2*220+2*250)   | 1140         | 748          | 757            | 17.60                | 733  |
|   |  | Panki TPS (2*105)                 | 210          | 108          | 108            | 2.60                 | 108  |
| Harduaganj TPS (1*60+1*105+2*250)                                 |  | 665                               | 405          | 438          | 10.20          | 425                  |      |
| Tanda TPS (NTPC) (4*110)  |  | 440                               | 370          | 360          | 8.94           | 373                  |      |
| Roza TPS (IPP) (4*300)  |  | 1200                              | 550          | 540          | 13.12          | 547                  |      |
| Anpara-C (IPP) (2*600)  |  | 1200                              | 1089         | 1062         | 25.68          | 1070                 |      |
| Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)                             |  | 450                               | 365          | 365          | 8.50           | 354                  |      |
| Anpara-D(1*500)   |  | 500                               | 0            | 0            | 0.00           | 0                    |      |
| Lalitpur TPS(1*660)   |  | 660                               | 0            | 0            | 0.00           | 0                    |      |
| <b>Thermal (Total)</b>  |  | <b>9289</b>                       | <b>5280</b>  | <b>5331</b>  | <b>126</b>     | <b>5235</b>          |      |
| Vishnuparyag HPS (IPP)(including Alakananada)                     |  | 730                               | 268          | 246          | 6.12           | 255                  |      |
| Other Hydro   |  | 527                               | 279          | 249          | 6.27           | 261                  |      |
| Cogeneration  |  | 981                               | 50           | 50           | 1.20           | 50                   |      |
| <b>Total UP</b>   |  | <b>11527</b>                      | <b>5877</b>  | <b>5876</b>  | <b>139.23</b>  | <b>5546</b>          |      |
| Uttarakhand   | Total Hydro  | 1398                              | 978          | 1019         | 22.12          | 922                  |      |
|   | <b>Total Uttarakhand</b>                           | <b>1398</b>                       | <b>978</b>   | <b>1019</b>  | <b>22.12</b>   | <b>922</b>           |      |
| Delhi   | Rajghat TPS (2*67.5)                               | 135                               | 0            | 0            | 0.00           | 0                    |      |
|   | Delhi Gas Turbine (6x30 + 3x34)                    | 282                               | 69           | 69           | 1.52           | 63                   |      |
|   | Pragati Gas Turbine (2x104+ 1x122)                 | 330                               | 259          | 259          | 0.31           | 13                   |      |
|   | Rithala GPS (3*36)                                 | 95                                | 0            | 0            | 0.00           | 0                    |      |
|   | Bawana GPS (6*250)                                 | 1370                              | 31           | 0            | 6.52           | 272                  |      |
|   | Badarpur TPS (NTPC) (3*95+2*210)                   | 705                               | 359          | 320          | 8.40           | 350                  |      |
|   | Thermal (Total)                                    | 2917                              | 718          | 648          | 16.75          | 698                  |      |
|   | <b>Total Delhi</b>                                 | <b>2917</b>                       | <b>718</b>   | <b>648</b>   | <b>16.75</b>   | <b>698</b>           |      |
| HP  | Baspa HPS (IPP) (2*100)                            | 300                               | 301          | 331          | 7.72           | 322                  |      |
|   | Malana HPS (IPP) (2*43)                            | 86                                | 98           | 98           | 2.34           | 98                   |      |
|   | Other Hydro  | 878                               | 602          | 544          | 13.14          | 548                  |      |
|   | <b>Total HP</b>                                    | <b>1264</b>                       | <b>1001</b>  | <b>973</b>   | <b>23.20</b>   | <b>967</b>           |      |
| J & K   | Baglihar HPS (IPP) (3*150)                         | 450                               | 442          | 440          | 10.15          | 423                  |      |
|   | Other Hydro/IPP                                    | 560                               | 195          | 190          | 4.43           | 185                  |      |
|   | Gas/Diesel/Others                                  | 190                               | 0            | 0            | 0.00           | 0                    |      |
|   | <b>Total J &amp; K</b>                             | <b>1200</b>                       | <b>637</b>   | <b>630</b>   | <b>14.59</b>   | <b>608</b>           |      |
| <b>Total State Control Area Generation</b>                        |  | <b>41881</b>                      | <b>19657</b> | <b>18559</b> | <b>463.33</b>  | <b>19050</b>         |      |
| <b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b> |  |                                   | <b>1766</b>  | <b>2219</b>  | <b>151.47</b>  | <b>6311</b>          |      |
| <b>Total Regional Availability(Gross)</b>                         |  | <b>67100</b>                      | <b>42439</b> | <b>40090</b> | <b>1078.04</b> | <b>44663</b>         |      |

#### IV. Total Hydro Generation:

|                             |              |              |              |               |              |
|-----------------------------|--------------|--------------|--------------|---------------|--------------|
| Regional Entities Hydro     | 12216        | 11416        | 10435        | 252.27        | 10511        |
| State Control Area Hydro    | 5811         | 3777         | 3664         | 91.84         | 3571         |
| <b>Total Regional Hydro</b> | <b>18027</b> | <b>15193</b> | <b>14099</b> | <b>344.10</b> | <b>14083</b> |

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

| Element                    | Peak(20:00 Hrs) | Off Peak(03:00 Hrs) | Maximum Interchange (MW) |        | Energy (MU)   |              | Net Energy MU |
|----------------------------|-----------------|---------------------|--------------------------|--------|---------------|--------------|---------------|
|                            | MW              | MW                  | Import                   | Export | Import        | Export       |               |
|                            | Vindhychal B/B  | 250                 | -100                     | 450    | 100           | 3.52         |               |
| Gwalior-Agra (D/C)         | -2197           | -1941               | 2360                     | 0      | 42.54         | 0.00         | 42.54         |
| Zerda-Kankroli             | 56              | -65                 | -56                      | 176    | 0.00          | 2.27         | -2.27         |
| Zerda-Bhinmal              | 85              | -46                 | 90                       | 186    | 0.00          | 1.57         | -1.57         |
| Malanpur-Auraiya           | -12             | -29                 | 0                        | 29     | 0.00          | 0.47         | -0.47         |
| Badod-Kota/Morak           | 24              | 35                  | 48                       | 18     | 0.81          | 0.00         | 0.81          |
| Mundra-Mohinderqarh(HVDC)  | 1198            | 2002                | 2505                     | 0      | 46.41         | 0.00         | 46.41         |
| Vindhychal - Rihand        | 497             | 364                 | 498                      | 0      | 10.94         | 0.00         | 10.94         |
| <b>Sub Total WR</b>        | <b>-99</b>      | <b>220</b>          |                          |        | <b>104.22</b> | <b>5.55</b>  | <b>98.66</b>  |
| Pusauli Bypass             | 400             | 400                 | 400                      | 0      | 9.35          | 0.00         | 9.35          |
| MZP- GKP (D/C)             | 338             | 536                 | 644                      | 0      | 12.14         | 0.00         | 12.14         |
| Patna-Balia(D/C)           | 260             | 232                 | 363                      | 0      | 6.35          | 0.00         | 6.35          |
| B'Sharif-Balia (D/C)       | 113             | 181                 | 241                      | 0      | 4.41          | 0.00         | 4.41          |
| Pusauli-Balia              | 105             | 121                 | 163                      | 0      | 1.29          | 0.00         | 1.29          |
| Gaya-Fatehpur (765 Kv)     | 231             | 192                 | 402                      | 0      | 6.34          | 0.00         | 6.34          |
| Pusauli-Sahupuri           | 139             | 73                  | 203                      | 0      | 3.78          | 0.00         | 3.78          |
| K'nasa-Sahupuri            | 0               | 0                   | 0                        | 0      | 0.05          | 0.00         | 0.05          |
| Son Ngr-Rihand             | -29             | -40                 | 0                        | -44    | 0.00          | -0.88        | 0.88          |
| Garhwa-Rihand              | 0               | 0                   | 0                        | 0      | 0.00          | 0.00         | 0.00          |
| Sasaram - Fatehpur(765 KV) | 58              | 70                  | 254                      | 21     | 2.88          | 0.00         | 2.88          |
| Barh -GKP (D/C)            | 250             | 234                 | 240                      | 0      | 5.35          | 0.00         | 5.35          |
| <b>Sub Total ER</b>        | <b>1865</b>     | <b>1999</b>         |                          |        | <b>51.93</b>  | <b>-0.88</b> | <b>52.81</b>  |
| <b>Total IR Exch</b>       | <b>1766</b>     | <b>2219</b>         |                          |        | <b>156.14</b> | <b>4.67</b>  | <b>151.47</b> |

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

| ISGS/LT Schedule (MU) |        |       | Bilateral Schedule (MU) |            | Power Exchange Shdl (MU) |            | Wheeling (MU) |            |
|-----------------------|--------|-------|-------------------------|------------|--------------------------|------------|---------------|------------|
| ER                    | Bhutan | Total | Through ER              | Through WR | Through ER               | Through WR | Through ER    | Through WR |
| 37.44                 | 3.63   | 41.07 | 8.92                    | 11.12      | 0.51                     | 0.00       | 2.31          | -2.31      |

| Total IR Schedule (MU) |                         |        | Total IR Actual (MU) |            |        | Net IR UI (MU) |            |       |
|------------------------|-------------------------|--------|----------------------|------------|--------|----------------|------------|-------|
| Through ER             | Through WR Inclds Mndra | Total  | Through ER           | Through WR | Total  | Through ER     | Through WR | Total |
| 52.81                  | 88.28                   | 141.09 | 52.81                | 98.66      | 151.47 | 0.00           | 10.38      | 10.38 |

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

| Element | Peak(20:00 Hrs)                 | Off Peak(03:00 Hrs) | Maximum Interchange (MW) |        | Energy (MU) |        | Net Energy MU |
|---------|---------------------------------|---------------------|--------------------------|--------|-------------|--------|---------------|
|         | MW                              | MW                  | Import                   | Export | Import      | Export |               |
|         | 132 KV Tanakpur - Mahendarnagar | -26                 | -24                      | 0      | 28          | 0      |               |

**VI. 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  | 0.23  | 8.56  | 53.84 | 75.54      | 12.86       | 3.07        | 0.00   | 0.00   |

| Frequency (Hz) |       |         |       | Average Frequency Hz | Frequency Variation Index | Std. Dev. | Frequency in 15 Min Block |          |
|----------------|-------|---------|-------|----------------------|---------------------------|-----------|---------------------------|----------|
| Maximum        |       | Minimum |       |                      |                           |           | MAX (Hz)                  | MIN (Hz) |
| Freq           | Time  | Freq    | Time  |                      |                           |           |                           |          |
| 50.17          | 13.02 | 49.79   | 19.31 | 49.99                | 0.04                      | 0.06      | 50.21                     | 49.92    |

**VII. Voltage profile 400 kV**

| Station    | Voltage Level (kV) | Maximum     |       | Minimum      |       | Voltage (in % of Time) |         |         |         |
|------------|--------------------|-------------|-------|--------------|-------|------------------------|---------|---------|---------|
|            |                    | Voltage(KV) | Time  | Voltage (KV) | Time  | <380 kV                | <390 kV | >420 kV | >430 kV |
| Rihand     | 400                | 402         | 13:13 | 397          | 14:21 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Gorakhpur  | 400                | 415         | 13:13 | 397          | 23:07 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Bareilly   | 400                | 418         | 08:00 | 396          | 20:00 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Kanpur     | 400                | 411         | 18:01 | 398          | 20:09 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Dadri      | 400                | 410         | 05:08 | 394          | 14:29 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Ballabgarh | 400                | 414         | 03:47 | 397          | 14:28 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Bawana     | 400                | 412         | 05:16 | 397          | 14:33 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Bassi      | 400                | 417         | 03:53 | 400          | 14:21 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Hissar     | 400                | 405         | 05:04 | 390          | 14:24 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Moga       | 400                | 405         | 01:59 | 395          | 14:23 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Abdullapur | 400                | 409         | 05:07 | 396          | 17:52 | 0.0                    | 2.3     | 0.0     | 0.0     |
| Nalagarh   | 400                | 406         | 01:59 | 394          | 14:21 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Kishenpur  | 400                | 413         | 08:01 | 400          | 20:29 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Wagoora    | 400                | 407         | 08:02 | 385          | 20:29 | 0.0                    | 8.3     | 0.0     | 0.0     |

**VIII. Voltage profile 765 kV**

| Station  | Voltage Level (kV) | Maximum     |       | Minimum      |       | Voltage (in % of Time) |         |         |         |
|----------|--------------------|-------------|-------|--------------|-------|------------------------|---------|---------|---------|
|          |                    | Voltage(KV) | Time  | Voltage (KV) | Time  | <728 kV                | <742 kV | >800 kV | >820 kV |
| Fatehpur | 765                | 777         | 18:01 | 748          | 09:19 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Balia    | 765                | 768         | 18:02 | 740          | 23:18 | 0.0                    | 0.9     | 0.0     | 0.0     |
| Moga     | 765                | 774         | 13:02 | 751          | 14:29 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Agra     | 765                | 782         | 13:16 | 756          | 20:09 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Bhiwani  | 765                | 783         | 03:49 | 759          | 14:23 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Unnao    | 765                | 752         | 18:02 | 730          | 23:07 | 0.0                    | 66.6    | 0.0     | 0.0     |

**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   | 500.14             | 1101.35     | 498.08    | 1018.16     | 1872.59                    | 1168.07                   |
| Pong              | 426.72     | 384.05   | 413.04             | 600.05      | 403.74    | 312.39      | 1177.72                    | 238.40                    |
| Tehri             | 829.79     | 740.04   | 784.50             | 375.00      | 778.85    | 300.00      | 1052.75                    | 217.00                    |
| Koteshwar         | 612.50     | 598.50   | 609.73             | 4.95        | 611.35    | 5.10        | 217.00                     | 218.37                    |
| Chamera-I         | 760.00     | 748.75   | 0.00               | 0.00        | 0.00      | 0.00        | 618.66                     | 353.46                    |
| 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   | 523.11             | 10.44       | 519.47    | 11.51       | 748.95                     | 245.25                    |

\* 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       | 1367                        | 22         | 0         | 1133                   | 0          | 0         | 32.69           | 0.28            | 32.97        |
| Delhi        | 308                         | -104       | -2        | 387                    | 15         | -27       | 10.75           | 0.65            | 11.39        |
| Haryana      | 1379                        | 245        | 0         | 1342                   | 178        | 0         | 33.36           | 3.71            | 37.07        |
| HP           | -1284                       | -224       | 0         | -1081                  | -240       | 0         | -27.56          | -5.92           | -33.48       |
| J&K          | -586                        | -96        | 0         | -434                   | 40         | 0         | -11.45          | -0.90           | -12.34       |
| CHD          | 0                           | 0          | 0         | 0                      | 0          | 0         | 0.24            | 0.11            | 0.35         |
| Rajasthan    | -494                        | 525        | 2         | -494                   | 239        | 2         | -11.86          | 10.26           | -1.60        |
| UP           | 857                         | 0          | 0         | 570                    | 0          | 0         | 14.69           | 0.00            | 14.69        |
| Uttarakhand  | -57                         | 0          | 0         | -57                    | 78         | 24        | -1.37           | 0.88            | -0.49        |
| <b>Total</b> | <b>1491</b>                 | <b>369</b> | <b>0</b>  | <b>1366</b>            | <b>309</b> | <b>-1</b> | <b>39.49</b>    | <b>9.07</b>     | <b>48.56</b> |

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

| State       | Bilateral (MW) |         | IEX (MW) |         | PXIL (MW) |         |
|-------------|----------------|---------|----------|---------|-----------|---------|
|             | Maximum        | Minimum | Maximum  | Minimum | Maximum   | Minimum |
| Punjab      | 1566           | 1133    | 109      | 0       | 0         | 0       |
| Delhi       | 890            | 65      | 368      | -214    | 0         | -27     |
| Haryana     | 1565           | 1342    | 246      | -165    | 0         | 0       |
| HP          | -1081          | -1284   | -224     | -367    | 0         | 0       |
| J&K         | -417           | -586    | 40       | -96     | 0         | 0       |
| CHD         | 29             | 0       | 39       | 0       | 0         | 0       |
| Rajasthan   | -494           | -495    | 613      | 103     | 2         | 0       |
| UP          | 873            | 454     | 0        | 0       | 0         | 0       |
| Uttarakhand | -57            | -57     | 78       | 0       | 24        | 0       |

**XI. System Constraints:****XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 23.07.2015 :**

Normal

**XIV. Synchronisation of new generating units :****XV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :**

0.00

**XVI. Tripping of lines in pooling stations :****XVII. Complete generation loss in a generating station :**