

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्ट की पूर्ण स्वामित्व प्राप्त महायुक्त कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 10.05.2015  
Date of Reporting : 11.05.2015

### 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 |
| 39634                       | 2913     | 42548       | 50.06      | 41794                   | 2286     | 44080       | 49.98      | 964.0               | 48.73    |

\* 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<br>(Net MU) | Actual Drawal<br>(Net MU) | UI<br>(Net MU) | Consumption<br>(Net MU) | Shortages *<br>(MU) |
|--------------|--|--------------|---------------------|---------------|-----------------------------|---------------------------|----------------|-------------------------|---------------------|
|              | Thermal                                  | Hydro        | Renewable/others \$ | Total         |                             |                           |                |                         |                     |
| Punjab       | 30.37                                    | 15.84        |                     | 46.21         | 105.04                      | 104.33                    | -0.71          | 150.54                  | 1.08                |
| Haryana      | 43.49                                    | 0.65         |                     | 44.14         | 94.79                       | 92.80                     | -1.99          | 136.94                  | 0.02                |
| Rajasthan    | 107.90                                   | 0.00         | 10.15               | 118.06        | 75.32                       | 74.63                     | -0.68          | 192.69                  | 0.00                |
| Delhi        | 21.50                                    |              |                     | 21.50         | 75.64                       | 75.64                     | -0.01          | 97.13                   | 0.06                |
| UP           | 138.90                                   | 12.03        |                     | 150.92        | 131.95                      | 132.46                    | 0.51           | 283.38                  | 40.02               |
| Uttarakhand  |  | 14.99        |                     | 14.99         | 21.84                       | 22.04                     | 0.20           | 37.03                   | 0.19                |
| HP           |  | 19.19        |                     | 19.19         | 3.93                        | 4.67                      | 0.74           | 23.85                   | 0.00                |
| J & K        |  | 14.35        | 0.00                | 14.35         | 23.05                       | 23.04                     | -0.01          | 37.39                   | 7.37                |
| Chandigarh   |  |              |                     | 0.00          | 5.10                        | 5.08                      | 0.27           | 5.08                    | 0.00                |
| <b>Total</b> | <b>342.17</b>                            | <b>77.05</b> | <b>10.15</b>        | <b>429.37</b> | <b>536.65</b>               | <b>534.68</b>             | <b>-1.68</b>   | <b>964.04</b>           | <b>48.73</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       | 5574                        | 0           | -117       | 1292                | 6574                    | 65          | -134       | 1441                | 6826                                 |
| Haryana      | 5842                        | 0           | -118       | 272                 | 6207                    | 19          | 187        | 236                 | 6629                                 |
| Rajasthan    | 7393                        | 0           | 66         | 523                 | 8200                    | 0           | -34        | 596                 | 8778                                 |
| Delhi        | 3991                        | 0           | -174       | 593                 | 4373                    | 0           | 239        | 355                 | 4813                                 |
| UP           | 12062                       | 2515        | 230        | 378                 | 12414                   | 1930        | -91        | 1488                | 12771                                |
| Uttarakhand  | 1705                        | 35          | 50         | 391                 | 1562                    | 0           | 18         | 261                 | 1710                                 |
| HP           | 1007                        | 0           | -17        | -1218               | 901                     | 0           | 12         | -1335               | 1117                                 |
| J&K          | 1817                        | 363         | 172        | -303                | 1360                    | 272         | -14        | -556                | 1817                                 |
| Chandigarh   | 243                         | 0           | 9          | 0                   | 203                     | 0           | 2          | 0                   | 246                                  |
| <b>Total</b> | <b>39634</b>                | <b>2913</b> | <b>102</b> | <b>1927</b>         | <b>41794</b>            | <b>2286</b> | <b>185</b> | <b>2486</b>         | <b>42666</b>                         |

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

Diversity is 1.05

### III. Regional Entities :

| A. NTPC                                 | Station/<br>Constituent          | Inst. Capacity<br>(Effective) MW | Declared<br>Capacity(MW) | Peak MW      | Off Peak MW  | Energy        | Average      | Schedule      | UI           |
|---|----------------------------------|----------------------------------|--------------------------|--------------|--------------|---------------|--------------|---------------|--------------|
|   |                                  |                                  |                          | (Gross)      | (Gross)      | (Net MU)      | Sentout(MW)  | Net MU        | Net MU       |
|   | Singrauli STPS (5*200+2*500)     | 2000                             | 1689                     | 1846         | 1816         | 43.52         | 1813         | 40.10         | 3.42         |
|   | Rihand I STPS (2*500)            | 1000                             | 790                      | 783          | 846          | 19.45         | 810          | 17.92         | 1.52         |
|   | Rihand II STPS (2*500)           | 1000                             | 970                      | 795          | 1043         | 23.66         | 986          | 22.08         | 1.58         |
|   | Rihand III STPS (2*500)          | 1000                             | 960                      | 803          | 1022         | 22.25         | 927          | 21.01         | 1.24         |
|   | Dadri I STPS (4*210)             | 840                              | 582                      | 470          | 365          | 11.23         | 468          | 10.23         | 1.00         |
|   | Dadri II STPS (2*490)            | 980                              | 980                      | 699          | 805          | 17.67         | 736          | 17.55         | 0.12         |
|   | Unchahar I TPS (2*210)           | 420                              | 405                      | 286          | 388          | 7.61          | 317          | 8.02          | -0.41        |
|   | Unchahar II TPS (2*210)          | 420                              | 401                      | 242          | 377          | 7.17          | 299          | 7.35          | -0.18        |
|   | Unchahar III TPS (1*220)         | 210                              | 201                      | 143          | 157          | 3.36          | 140          | 3.47          | -0.11        |
|   | ISTPP (Jhajjar) (3*500)          | 1500                             | 1500                     | 689          | 1019         | 17.59         | 733          | 18.23         | -0.64        |
|   | Dadri GPS (4*130.19+2*154.51)    | 830                              | 807                      | 175          | 182          | 4.27          | 178          | 4.33          | -0.05        |
|   | Anta GPS (3*88.71+1*153.2)       | 419                              | 378                      | 233          | 189          | 5.34          | 222          | 5.22          | 0.12         |
|   | Auraiya GPS (4*111.19+2*109.30)  | 663                              | 644                      | 152          | 151          | 3.63          | 151          | 3.73          | -0.09        |
|   | Dadri Solar                      | 5                                | 1                        | 0            | 0            | 0.02          | 1            | 0.03          | 0.00         |
|   | Unchahar Solar                   | 10                               | 3                        | 0            | 0            | 0.03          | 1            | 0.06          | -0.03        |
|   | Singrauli Solar                  | 15                               | 3                        | 0            | 0            | 0.05          | 2            | 0.07          | -0.02        |
|   | KHEP                             | 400                              | 0                        | 196          | 196          | 3.10          | 129          | 0.00          | 3.10         |
|   | <b>Sub Total (A)</b>             | <b>11712</b>                     | <b>10313</b>             | <b>7512</b>  | <b>8556</b>  | <b>190</b>    | <b>7915</b>  | <b>179</b>    | <b>11</b>    |
| B. NPC                                  | NAPS (2*220)                     | 440                              | 379                      | 416          | 420          | 9.09          | 379          | 9.10          | -0.01        |
|   | RAPS- B (2*220)                  | 440                              | 366                      | 366          | 366          | 9.00          | 375          | 7.30          | 1.70         |
|   | RAPS- C (2*220)                  | 440                              | 410                      | 410          | 410          | 9.51          | 396          | 9.84          | -0.33        |
|   | <b>Sub Total (B)</b>             | <b>1320</b>                      | <b>1155</b>              | <b>1192</b>  | <b>1196</b>  | <b>27.60</b>  | <b>1150</b>  | <b>26.24</b>  | <b>1.36</b>  |
| C. NHPC                                 | Chamera I HPS (3*180)            | 540                              | 540                      | 555          | 557          | 13.18         | 549          | 12.90         | 0.28         |
|   | Chamera II HPS (3*100)           | 300                              | 300                      | 313          | 307          | 7.30          | 304          | 7.15          | 0.16         |
|   | Chamera III HPS (3*77)           | 231                              | 231                      | 238          | 238          | 5.58          | 233          | 5.51          | 0.07         |
|   | Bairasul HPS(3*60)               | 180                              | 179                      | 180          | 180          | 4.37          | 182          | 4.23          | 0.14         |
|   | Salal-HPS (6*115)                | 690                              | 661                      | 667          | 666          | 16.04         | 668          | 15.87         | 0.17         |
|   | Tanakpur-HPS (3*40)              | 94                               | 61                       | 67           | 61           | 1.47          | 61           | 1.42          | 0.04         |
|   | Uri-I HPS (4*120)                | 480                              | 475                      | 475          | 475          | 11.70         | 487          | 11.33         | 0.37         |
|   | Uri-II HPS (4*60)                | 240                              | 0                        | 0            | 0            | 0.00          | 0            | 0.00          | 0.00         |
|   | Dhauliganga-HPS (4*70)           | 280                              | 210                      | 208          | 211          | 4.29          | 179          | 4.07          | 0.22         |
|   | Dulhasti-HPS (3*130)             | 390                              | 387                      | 406          | 401          | 9.42          | 393          | 9.29          | 0.13         |
|   | Sewa-II HPS (3*40)               | 120                              | 119                      | 130          | 130          | 3.08          | 128          | 2.84          | 0.24         |
|   | Parbati 3 (4*130)                | 520                              | 390                      | 390          | 0            | 2.78          | 116          | 2.76          | 0.02         |
|   | <b>Sub Total (C)</b>             | <b>4065</b>                      | <b>3553</b>              | <b>3630</b>  | <b>3227</b>  | <b>79</b>     | <b>3300</b>  | <b>77</b>     | <b>2</b>     |
| D.SJVNL                                 | NJPC (6*250)                     | 1500                             | 1605                     | 1605         | 1605         | 38.56         | 1607         | 38.52         | 0.04         |
|   | Rampur HEP (6*68.67)             | 412                              | 427                      | 438          | 370          | 10.41         | 434          | 10.29         | 0.12         |
|   | <b>Sub Total (D)</b>             | <b>1912</b>                      | <b>2032</b>              | <b>2043</b>  | <b>1975</b>  | <b>48.97</b>  | <b>2040</b>  | <b>48.81</b>  | <b>0.16</b>  |
| E. THDC                                 | Tehri HPS (4*250)                | 1000                             | 460                      | 466          | 317          | 8.10          | 337          | 8.00          | 0.10         |
|   | Koteshwar HPS (4*100)            | 400                              | 158                      | 201          | 100          | 3.71          | 155          | 3.78          | -0.06        |
|   | <b>Sub Total (E)</b>             | <b>1400</b>                      | <b>618</b>               | <b>667</b>   | <b>417</b>   | <b>11.81</b>  | <b>492</b>   | <b>11.78</b>  | <b>0.03</b>  |
| F. BBMB                                 | Bhakra HPS (3*108+2*126+6*157)   | 1514                             | 724                      | 1033         | 471          | 17.58         | 733          | 17.37         | 0.21         |
|   | Dehar HPS (6*165)                | 990                              | 604                      | 660          | 580          | 14.53         | 605          | 14.50         | 0.03         |
|   | Pong HPS (6*66)                  | 396                              | 249                      | 318          | 252          | 5.88          | 245          | 5.98          | -0.09        |
|   | <b>Sub Total (F)</b>             | <b>2900</b>                      | <b>1577</b>              | <b>2011</b>  | <b>1303</b>  | <b>37.99</b>  | <b>1583</b>  | <b>37.84</b>  | <b>0.15</b>  |
| G. IPP(s)/JV(s)                         | ALLAIN DUHANGAN HPS(IPP) (2*96)  | 192                              | 0                        | 222          | 193          | 4.25          | 177          | 3.90          | 0.35         |
|   | KARCHAM WANGTOO HPS(IPP) (4*250) | 1000                             | 0                        | 1050         | 950          | 23.15         | 965          | 23.09         | 0.06         |
|   | Malana Stg-II HPS (2*50)         | 100                              | 0                        | 111          | 95           | 2.13          | 89           | 2.00          | 0.13         |
|   | Shree Cement TPS (2*150)         | 300                              | 0                        | 263          | 299          | 6.13          | 256          | 6.05          | 0.08         |
|   | Budhil HPS(IPP)                  | 70                               | 0                        | 74           | 75           | 1.76          | 73           | 1.66          | 0.10         |
|   | <b>Sub Total (G)</b>             | <b>1662</b>                      | <b>0</b>                 | <b>1719</b>  | <b>1611</b>  | <b>37.42</b>  | <b>1559</b>  | <b>36.69</b>  | <b>0.73</b>  |
| <b>H. Total Regional Entities (A-G)</b> |                                  | <b>24972</b>                     | <b>19249</b>             | <b>18774</b> | <b>18285</b> | <b>432.96</b> | <b>18040</b> | <b>418.13</b> | <b>14.83</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                              | 640          | 670          | 17.67         | 736                  |            |
|   | Guru Nanak Dev TPS(Bhatinda) (4*110)          | 440                               | 90           | 117          | 2.45          | 102                  |            |
|   | Guru Hargobind Singh TPS(L.mbt) (2*210+2*250) | 920                               | 345          | 508          | 10.25         | 427                  |            |
|   | Goindwal(GVK)                                 |                                   | 0            | 0            | 0.00          | 0                    |            |
|   | Rajpura (2*700)                               | 1400                              | 0            | 0            | 0.00          | 0                    |            |
|   | Talwandi Saboo (1*660)                        | 660                               | 0            | 0            | 0.00          | 0                    |            |
|   | <b>Thermal (Total)</b>                        | <b>4680</b>                       | <b>1075</b>  | <b>1295</b>  | <b>30.37</b>  | <b>1266</b>          |            |
|   | Total Hydro                                   | 1148                              | 703          | 606          | 15.84         | 660                  |            |
|   | <b>Total Punjab</b>                           | <b>5828</b>                       | <b>1778</b>  | <b>1901</b>  | <b>46.21</b>  | <b>1926</b>          |            |
| Haryana   | Panipat TPS (4*110+2*210+2*250)               | 1367                              | 649          | 674          | 14.88         | 620                  |            |
|   | DCRTPP (Yamuna nagar) (2*300)                 | 600                               | 501          | 591          | 11.81         | 492                  |            |
|   | Faridabad GPS (NTPC)                          | 432                               | 175          | 178          | 4.28          | 178                  |            |
|   | RGTPP (kheadar) (IPP) (2*600)                 | 1200                              | 0            | 0            | 0.79          | 33                   |            |
|   | Magnum Diesel (IPP)                           | 25                                | 0            | 0            | 0.00          | 0                    |            |
|   | Jhajjar(CLP) (2*660)                          | 1320                              | 406          | 619          | 11.74         | 489                  |            |
|   | <b>Thermal (Total)</b>                        | <b>4944</b>                       | <b>1731</b>  | <b>2062</b>  | <b>43.49</b>  | <b>1812</b>          |            |
|   | Total Hydro                                   | 62                                | 16           | 19           | 0.65          | 27                   |            |
|   | <b>Total Haryana</b>                          | <b>5006</b>                       | <b>1747</b>  | <b>2081</b>  | <b>44.14</b>  | <b>1839</b>          |            |
|   | Rajasthan                                     | kota TPS (2*110+2*195+3*210)      | 1240         | 708          | 696           | 16.70                | 696        |
|   |   | suratgarh TPS (6*250)             | 1500         | 788          | 744           | 17.67                | 736        |
| Chabra TPS (4*250)  |   | 1000                              | 597          | 519          | 13.23         | 551                  |            |
| 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                               | 155          | 128          | 3.70          | 154                  |            |
| RAPS A (NPC) (1*100+1*200)                                      |   | 300                               | 142          | 143          | 3.51          | 146                  |            |
| Barsingar (NLC) (2*125)   |   | 250                               | 97           | 95           | 2.14          | 89                   |            |
| Giral LTPS (2*125)  |   | 250                               | 0            | 0            | 0.00          | 0                    |            |
| Rajwest LTPS (IPP) (8*135)                                      |   | 1080                              | 640          | 732          | 17.40         | 725                  |            |
| VS LIGNITE LTPS (IPP) (1*135)                                   |   | 135                               | 0            | 0            | 0.00          | 0                    |            |
| Kalisindh Thermal(1*600)  |   | 600                               | 442          | 442          | 10.65         | 444                  |            |
| Kawai(Adani) (2*660)  |   | 1320                              | 588          | 1020         | 22.91         | 955                  |            |
| <b>Thermal (Total)</b>  |   | <b>8276</b>                       | <b>4157</b>  | <b>4519</b>  | <b>108</b>    | <b>4496</b>          |            |
| Total Hydro   |   | 550                               | 0            | 0            | 0.00          | 0                    |            |
| Wind power  |   | 2798                              | 292          | 694          | 9.51          | 396                  |            |
| Biomass   |   | 99                                | 24           | 24           | 0.57          | 24                   |            |
| Solar   |   | 730                               | 0            | 0            | 0.07          | 3                    |            |
| Renewable/Others (Total)  |   | 3627                              | 316          | 718          | 10.15         | 423                  |            |
| <b>Total Rajasthan</b>  |   | <b>12453</b>                      | <b>4473</b>  | <b>5237</b>  | <b>118.06</b> | <b>4919</b>          |            |
| UP  |   | Anpara TPS (3*210+2*500)          | 1630         | 1309         | 1268          | 30.10                | 1254       |
|   | Obra TPS (2*50+2*94+5*200)                    | 1194                              | 471          | 446          | 11.00         | 458                  |            |
|   | Paricha TPS (2*110+2*220+2*250)               | 1140                              | 742          | 787          | 18.00         | 750                  |            |
|   | Panki TPS (2*105)                             | 210                               | 68           | 54           | 1.35          | 56                   |            |
|   | Harduaganj TPS (1*60+1*105+2*250)             | 665                               | 223          | 223          | 5.40          | 225                  |            |
|   | Tanda TPS (NTPC) (4*110)                      | 440                               | 287          | 295          | 7.14          | 297                  |            |
|   | Roza TPS (IPP) (4*300)                        | 1200                              | 1067         | 1062         | 25.55         | 1065                 |            |
|   | Anpara-C (IPP) (2*600)                        | 1200                              | 1071         | 1085         | 25.74         | 1073                 |            |
|   | Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)         | 450                               | 403          | 345          | 9.48          | 395                  |            |
|   | Anpara-D                                      | 500                               | 0            | 0            | 0.34          | 14                   |            |
|   | <b>Thermal (Total)</b>                        | <b>8629</b>                       | <b>5641</b>  | <b>5565</b>  | <b>134</b>    | <b>5587</b>          |            |
|   | Vishnuparyag HPS (IPP)(including Alaknanda)   | 400                               | 509          | 468          | 10.70         | 446                  |            |
|   | Other Hydro                                   | 527                               | 71           | 69           | 1.32          | 55                   |            |
|   | Cogeneration                                  | 981                               | 200          | 200          | 4.80          | 200                  |            |
|   | <b>Total UP</b>                               | <b>10537</b>                      | <b>6421</b>  | <b>6302</b>  | <b>150.92</b> | <b>5843</b>          |            |
|   | Uttarakhand                                   | Total Hydro                       | 1398         | 604          | 637           | 14.99                | 625        |
|   |   | <b>Total Uttarakhand</b>          | <b>1398</b>  | <b>604</b>   | <b>637</b>    | <b>14.99</b>         | <b>625</b> |
| Delhi   | Rajghat TPS (2*67.5)                          | 135                               | 52           | 52           | 0.82          | 34                   |            |
|   | Delhi Gas Turbine (6x30 + 3x34)               | 282                               | 138          | 141          | 3.30          | 137                  |            |
|   | Praagati Gas Turbine (2x104+ 1x122)           | 330                               | 270          | 287          | 5.10          | 213                  |            |
|   | Rithala GPS (3*36)                            | 95                                | 0            | 0            | 0.00          | 0                    |            |
|   | Bawana GPS (6*250)                            | 1370                              | 290          | 286          | 6.73          | 280                  |            |
|   | Badarpur TPS (NTPC) (3*95+2*210)              | 705                               | 293          | 157          | 5.55          | 231                  |            |
|   | Thermal (Total)                               | 2917                              | 1043         | 923          | 21.50         | 896                  |            |
|   | <b>Total Delhi</b>                            | <b>2917</b>                       | <b>1043</b>  | <b>923</b>   | <b>21.50</b>  | <b>896</b>           |            |
| HP  | Baspa HPS (IPP) (2*150)                       | 300                               | 248          | 239          | 5.20          | 217                  |            |
|   | Malana HPS (IPP) (2*43)                       | 86                                | 95           | 66           | 1.74          | 72                   |            |
|   | Other Hydro                                   | 728                               | 522          | 507          | 12.25         | 511                  |            |
|   | <b>Total HP</b>                               | <b>1114</b>                       | <b>865</b>   | <b>812</b>   | <b>19.19</b>  | <b>800</b>           |            |
| J & K   | Baglihar HPS (IPP) (3*150)                    | 450                               | 440          | 440          | 10.55         | 439                  |            |
|   | Other Hydro/IPP                               | 436                               | 174          | 164          | 3.81          | 159                  |            |
|   | Gas/Diesel/Others                             | 209                               | 0            | 0            | 0.00          | 0                    |            |
|   | <b>Total J &amp; K</b>                        | <b>1094</b>                       | <b>614</b>   | <b>604</b>   | <b>14.35</b>  | <b>598</b>           |            |
| <b>Total State Control Area Generation</b>                      |   | <b>40347</b>                      | <b>17545</b> | <b>18497</b> | <b>429.37</b> | <b>17444</b>         |            |
| <b>J. Net Inter Regional Exchange (import +ve)/Export (-ve)</b> |   |                                   | <b>5249</b>  | <b>6080</b>  | <b>124.39</b> | <b>5183</b>          |            |
| <b>Total Regional Availability(Gross)</b>                       |   | <b>65319</b>                      | <b>41568</b> | <b>42862</b> | <b>986.72</b> | <b>40667</b>         |            |

#### IV. Total Hydro Generation:

|                             |              |              |              |               |              |
|-----------------------------|--------------|--------------|--------------|---------------|--------------|
| Regional Entities Hydro     | 11969        | 9930         | 8356         | 210.604531    | 8775         |
| State Control Area Hydro    | 5684         | 2873         | 2747         | 77.05         | 2765         |
| <b>Total Regional Hydro</b> | <b>17654</b> | <b>12803</b> | <b>11103</b> | <b>287.65</b> | <b>11540</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       |               |  |               |
|                            |                 |             |                     |        |                          |              |               |  |               |
| Vindhyachal B/B            | 50              | 100         | 250                 | 300    | 0.56                     | 2.12         | -1.56         |  |               |
| Gwalior-Agra (D/C)         | 1965            | 2226        | 2331                | 0      | 43.42                    | 0.00         | 43.42         |  |               |
| Zerda-Kankroli             | -207            | -211        | 0                   | 352    | 0.00                     | 5.60         | -5.60         |  |               |
| Zerda-Bhinmal              | -158            | -161        | 0                   | 342    | 0.00                     | 3.76         | -3.76         |  |               |
| Malanpur-Auraiya           | -37             | -22         | 0                   | 68     | 0.00                     | 0.79         | -0.79         |  |               |
| Badod-Kota/Morak           | -41             | -9          | 12                  | 56     | 0.00                     | 0.53         | -0.53         |  |               |
| Mundra-Mohinderghar(HVDC)  | 2496            | 2503        | 2508                | 0      | 59.69                    | 0.00         | 59.69         |  |               |
| Vindhyachal - Rihand       | 484             | 496         | 500                 | 0      | 11.36                    | 0.00         | 11.36         |  |               |
| <b>Sub Total WR</b>        | <b>4552</b>     | <b>4922</b> |                     |        | <b>115.03</b>            | <b>12.80</b> | <b>102.23</b> |  |               |
| Pusaui Bypass              | -410            | -406        | 0                   | 470    | 0.00                     | 9.45         | -9.45         |  |               |
| MZP- GKP (D/C)             | 210             | 277         | 346                 | 0      | 4.46                     | 0.00         | 4.46          |  |               |
| Patna-Balia(D/C)           | 354             | 497         | 524                 | 0      | 10.48                    | 0.00         | 10.48         |  |               |
| B'Sharif-Balia (D/C)       | 54              | 109         | 151                 | 0      | 2.09                     | 0.00         | 2.09          |  |               |
| Pusaui-Balia               | 98              | 149         | 179                 | 0      | 1.54                     | 0.00         | 1.54          |  |               |
| Gaya-Fatehpur (765 Kv)     | 130             | 203         | 272                 | 0      | 4.58                     | 0.00         | 4.58          |  |               |
| Pusaui-Sahupuri            | 176             | 183         | 205                 | 0      | 4.40                     | 0.00         | 4.40          |  |               |
| K'nasa-Sahupuri            | 0               | 0           | 0                   | 0      | 0.05                     | 0.02         | 0.03          |  |               |
| Son Ngr-Rihand             | -30             | -36         | 0                   | 42     | 0.00                     | 0.09         | -0.09         |  |               |
| Garhwa-Rihand              | 0               | 0           | 0                   | 0      | 0.00                     | 0.00         | 0.00          |  |               |
| Sasaram - Fatehpur(765 KV) | 115             | 182         | 253                 | 0      | 4.13                     | 0.00         | 4.13          |  |               |
| <b>Sub Total ER</b>        | <b>697</b>      | <b>1158</b> |                     |        | <b>31.73</b>             | <b>9.56</b>  | <b>22.17</b>  |  |               |
| <b>Total IR Exch</b>       | <b>5249</b>     | <b>6080</b> |                     |        | <b>146.75</b>            | <b>22.36</b> | <b>124.39</b> |  |               |

**V(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 |
|       |                       |       |                         |            |                          |            |               |            |
| 32.60 | 1.12                  | 33.72 | 0.65                    | 6.08       | 15.61                    | 0.25       | 0.83          | -0.83      |

| Total IR Schedule (MU) |                        |        | Total IR Actual (MU) |            |        | Net IR UI (MU) |            |        |
|------------------------|------------------------|--------|----------------------|------------|--------|----------------|------------|--------|
| Through ER             | Through WR Incld Mndra | Total  | Through ER           | Through WR | Total  | Through ER     | Through WR | Total  |
| 50.81                  | 85.89                  | 136.71 | 22.17                | 102.23     | 124.39 | -28.65         | 16.33      | -12.31 |

**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 | -36             | -38 | 0                   | 43     | 0                        | 1      | -0.93       |  |               |

**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  | 0.34  | 12.46 | 50.37 | 64.98      | 13.97       | 7.56        | 1.13   | NA     |

| Frequency (Hz) -----> |       |         |       | Average Frequency Hz | Frequency Variation Index | Std. Dev. (Hz) | Frequency in 15 Min Block |          |
|-----------------------|-------|---------|-------|----------------------|---------------------------|----------------|---------------------------|----------|
| Maximum               |       | Minimum |       |                      |                           |                | MAX (Hz)                  | MIN (Hz) |
| Freq                  | Time  | Freq    | Time  |                      |                           |                |                           |          |
| 50.32                 | 18.04 | 49.74   | 19.25 | 50.00                | 0.06                      | 0.08           | 50.27                     | 49.90    |

**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                | 403         | 00:00 | 396          | 01:27 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Gorakhpur  | 400                | 415         | 07:06 | 395          | 00:23 | 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                | 416         | 17:36 | 399          | 00:20 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Dadri      | 400                | 413         | 08:31 | 399          | 00:35 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Ballabgarh | 400                | 419         | 18:05 | 401          | 23:07 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Bawana     | 400                | 415         | 18:05 | 400          | 23:10 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Bassi      | 400                | 418         | 18:05 | 395          | 23:07 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Hissar     | 400                | 406         | 18:04 | 389          | 00:21 | 0.0                    | 2.2     | 0.0     | 0.0     |
| Moga       | 400                | 415         | 18:05 | 399          | 01:30 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Abdullapur | 400                | 411         | 17:01 | 396          | 23:09 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Nalagarh   | 400                | 412         | 18:04 | 402          | 01:30 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Kishenpur  | 400                | 416         | 18:01 | 407          | 20:04 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Wagoora    | 400                | 408         | 03:34 | 387          | 20:09 | 0.0                    | 5.7     | 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                | 783         | 18:05 | 745          | 23:09 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Balia    | 765                | 773         | 17:36 | 741          | 00:21 | 0.0                    | 1.0     | 0.0     | 0.0     |
| Moga     | 765                | 790         | 18:04 | 757          | 01:33 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Agra     | 765                | 791         | 18:04 | 752          | 23:08 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Bhiwani  | 765                | 0           | 00:00 | 9999         | 00:00 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Unnao    | 765                | 769         | 18:04 | 730          | 00:22 | 0.0                    | 21.3    | 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   | 485.65             | 602.35      | 481.81    | 503.43      | 753.06                     | 590.49                    |
| Pong              | 426.72     | 384.05   | 405.35             | 352.07      | 403.11    | 296.79      | 242.08                     | 401.82                    |
| Tehri             | 829.79     | 740.04   | 757.90             | 105.63      | 752.55    | 65.00       | 150.18                     | 256.00                    |
| Koteshwar         | 612.50     | 598.50   | 611.20             | 5.17        | 610.41    | 4.69        | 256.00                     | 246.00                    |
| Chamera-I         | 760.00     | 748.75   | 759.73             | 0.00        | 0.00      | 0.00        | 409.72                     | 356.94                    |
| Rihand            | 268.22     | 252.98   | 840.60             | 125.00      | 846.70    | 205.10      | 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   | 522.91             | 6.50        | 519.49    | 4.09        | 321.37                     | 189.41                    |

\* 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       | 325                         | 1116        | 0         | 318                    | 974         | 0         | 7.77            | 21.89           | 29.67        |
| Delhi        | 356                         | 29          | -30       | 399                    | 194         | 0         | 9.70            | 3.37            | 13.07        |
| Haryana      | 78                          | 158         | 0         | 145                    | 127         | 0         | 2.24            | 3.40            | 5.64         |
| HP           | -940                        | -395        | 0         | -383                   | -835        | 0         | -13.64          | -15.62          | -29.26       |
| J&K          | -466                        | -91         | 0         | -303                   | 0           | 0         | -8.71           | -0.25           | -8.96        |
| CHD          | 0                           | 0           | 0         | 0                      | 0           | 0         | 0.24            | 0.04            | 0.27         |
| Rajasthan    | -121                        | 715         | 2         | -117                   | 638         | 2         | -2.85           | 19.76           | 16.91        |
| UP           | 1096                        | 392         | 0         | 378                    | 0           | 0         | 13.35           | 2.45            | 15.80        |
| Uttarakhand  | 74                          | 139         | 49        | 74                     | 269         | 49        | 1.77            | 5.71            | 7.47         |
| <b>Total</b> | <b>403</b>                  | <b>2062</b> | <b>21</b> | <b>510</b>             | <b>1366</b> | <b>51</b> | <b>9.87</b>     | <b>40.75</b>    | <b>50.62</b> |

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

| State       | Bilateral (MW) |         | IEX (MW) |         | PXIL (MW) |         |
|-------------|----------------|---------|----------|---------|-----------|---------|
|             | Maximum        | Minimum | Maximum  | Minimum | Maximum   | Minimum |
| Punjab      | 325            | 318     | 1253     | 291     | 2         | 0       |
| Delhi       | 458            | 306     | 546      | -132    | 0         | -30     |
| Haryana     | 145            | 74      | 161      | 126     | 0         | 0       |
| HP          | -383           | -940    | -385     | -940    | 0         | 0       |
| J&K         | -263           | -466    | 74       | -91     | 0         | 0       |
| CHD         | 30             | 0       | 15       | 0       | 0         | 0       |
| Rajasthan   | -117           | -121    | 1404     | 464     | 2         | 2       |
| UP          | 1103           | 302     | 491      | 0       | 0         | 0       |
| Uttarakhand | 74             | 74      | 274      | 123     | 49        | 48      |

**XI. System Constraints:****XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 10.05.2015 :**

1) Cloudy weather in some area of Punjab, Haryana, HP, Uttaranchal.

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

1) 765 kV Meerut-Moga first time Synchronized at 02.58 hrs on 10-05-2015.

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