

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पॉवरसिस्ट की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 17.01.2015  
Date of Reporting : 18.01.2015

### I. Regional Availability/Demand:

| Demand Met | Evening Peak (19:00 Hrs) MW |             |            | Off Peak (03:00 Hrs) MW |          |             | Day Energy (Net MU) |            |          |
|------------|-----------------------------|-------------|------------|-------------------------|----------|-------------|---------------------|------------|----------|
|            | Shortage                    | Requirement | Freq* (Hz) | Demand Met              | Shortage | Requirement | Freq* (Hz)          | Demand Met | Shortage |
| 38735      | 1656                        | 40391       | 50.07      | 29123                   | 646      | 29768       | 50.06               | 820.7      | 54.21    |

\* 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       | 43.54                                    | 7.46         |                     | 51.00         | 38.00                       | 38.97                     | 0.97           | 89.97                   | 0.00                |
| Haryana      | 67.59                                    | 0.43         |                     | 68.02         | 46.36                       | 44.85                     | -1.51          | 112.87                  | 0.00                |
| Rajasthan    | 125.94                                   | 4.30         | 6.04                | 136.29        | 71.34                       | 73.26                     | 1.92           | 209.55                  | 0.00                |
| Delhi        | 19.95                                    |              |                     | 19.95         | 47.00                       | 46.13                     | -0.86          | 66.08                   | 0.04                |
| UP           | 151.90                                   | 4.69         |                     | 156.59        | 79.91                       | 77.95                     | -1.96          | 234.54                  | 46.12               |
| Uttarakhand  |  | 10.31        |                     | 10.31         | 24.98                       | 26.46                     | 1.48           | 36.78                   | 0.50                |
| HP           |  | 3.98         |                     | 3.98          | 20.96                       | 21.01                     | 0.05           | 25.00                   | 0.11                |
| J & K        |  | 4.41         | 0.00                | 4.41          | 34.88                       | 37.75                     | 2.86           | 42.15                   | 7.44                |
| Chandigarh   |  |              |                     | 0.00          | 3.76                        | 3.79                      | 0.27           | 3.79                    | 0.00                |
| <b>Total</b> | <b>408.91</b>                            | <b>35.58</b> | <b>6.04</b>         | <b>450.54</b> | <b>367.20</b>               | <b>370.18</b>             | <b>3.22</b>    | <b>820.72</b>           | <b>54.21</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 (19:00 Hrs) MW |             |             |                     | Off Peak (03:00 Hrs) MW |            |            |                     | # Max(hourly) Demand<br>Met of Day (MW) |
|--------------|-----------------------------|-------------|-------------|---------------------|-------------------------|------------|------------|---------------------|---|
|              | Demand Met                  | Shortage    | UI          | STOA/PX transaction | Demand Met              | Shortage   | UI         | STOA/PX transaction |   |
| Punjab       | 4777                        | 0           | 52          | -373                | 2873                    | 0          | 47         | -277                | 5054                                    |
| Haryana      | 6092                        | 0           | -144        | -930                | 3485                    | 0          | -91        | -794                | 6092                                    |
| Rajasthan    | 9228                        | 0           | 113         | 937                 | 7903                    | 0          | 103        | 1043                | 10025                                   |
| Delhi        | 3223                        | 6           | -124        | -44                 | 1653                    | 0          | 97         | -919                | 3882                                    |
| UP           | 10264                       | 1240        | -353        | 89                  | 9401                    | 350        | -114       | 63                  | 10749                                   |
| Uttarakhand  | 1810                        | 75          | 15          | 696                 | 1267                    | 0          | 155        | 475                 | 1867                                    |
| HP           | 1236                        | 0           | -36         | 373                 | 766                     | 0          | -9         | 476                 | 1328                                    |
| J&K          | 1901                        | 335         | 102         | 610                 | 1675                    | 296        | 170        | 677                 | 1901                                    |
| Chandigarh   | 204                         | 0           | -10         | 19                  | 100                     | 0          | 8          | -31                 | 217                                     |
| <b>Total</b> | <b>38735</b>                | <b>1656</b> | <b>-385</b> | <b>1376</b>         | <b>29123</b>            | <b>646</b> | <b>365</b> | <b>713</b>          | <b>38735</b>                            |

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

# figures may not be at simultaneous hour.

Diversity is 1.06

### III. Regional Entities :

| Station/<br>Constituent                 | Inst. Capacity<br>(Effective) MW | Declared<br>Capacity(MW) | Peak MW<br>(Gross) | Off Peak MW<br>(Gross) | Energy<br>(Net MU) | Average<br>Sentout(MW) | Schedule<br>Net MU | UI<br>Net MU |
|---|----------------------------------|--------------------------|--------------------|------------------------|--------------------|------------------------|--------------------|--------------|
|   |                                  |                          |                    |                        |                    |                        |                    |              |
| <b>A. NTPC</b>                          |                                  |                          |                    |                        |                    |                        |                    |              |
| Singrauli STPS (5*200+2*500)            | 2000                             | 1388                     | 1398               | 1584                   | 36.29              | 1512                   | 33.31              | 2.98         |
| Rihand I STPS (2*500)                   | 1000                             | 844                      | 954                | 864                    | 21.82              | 909                    | 19.80              | 2.02         |
| Rihand II STPS (2*500)                  | 1000                             | 900                      | 951                | 890                    | 22.31              | 930                    | 20.71              | 1.60         |
| Rihand III STPS (2*500)                 | 1000                             | 966                      | 1034               | 886                    | 23.00              | 958                    | 21.70              | 1.30         |
| Dadri I STPS (4*210)                    | 840                              | 815                      | 740                | 606                    | 16.07              | 670                    | 16.07              | 0.00         |
| Dadri II STPS (2*490)                   | 980                              | 980                      | 880                | 755                    | 20.94              | 873                    | 20.94              | 0.00         |
| Unchahar I TPS (2*210)                  | 420                              | 391                      | 382                | 355                    | 9.29               | 387                    | 8.58               | 0.70         |
| Unchahar II TPS (2*210)                 | 420                              | 391                      | 416                | 314                    | 9.23               | 385                    | 8.35               | 0.88         |
| Unchahar III TPS (1*220)                | 210                              | 196                      | 175                | 167                    | 4.41               | 184                    | 3.98               | 0.42         |
| ISTPP (Jhajjar) (3*500)                 | 1500                             | 1500                     | 1284               | 868                    | 22.11              | 921                    | 23.71              | -1.60        |
| Dadri GPS (4*130.19+2*154.51)           | 830                              | 851                      | 383                | 262                    | 8.31               | 346                    | 8.22               | 0.08         |
| Anta GPS (3*88.71+1*153.2)              | 419                              | 426                      | 250                | 230                    | 5.94               | 247                    | 5.97               | -0.04        |
| Auraiva GPS (4*111.19+2*109.30)         | 663                              | 667                      | 123                | 135                    | 3.65               | 152                    | 3.60               | 0.05         |
| Dadri Solar                             | 5                                | 1                        | 0                  | 0                      | 0.01               | 0                      | 0.02               | -0.02        |
| Unchahar Solar                          | 10                               | 3                        | 0                  | 0                      | 0.00               | 0                      | 0.07               | -0.07        |
| Singrauli Solar                         | 15                               | 0                        | 0                  | 0                      | 0.00               | 0                      | 0                  | 0.00         |
| <b>Sub Total (A)</b>                    | <b>11312</b>                     | <b>10319</b>             | <b>8970</b>        | <b>7916</b>            | <b>203</b>         | <b>8474</b>            | <b>195</b>         | <b>8</b>     |
| <b>B. NPC</b>                           |                                  |                          |                    |                        |                    |                        |                    |              |
| NAPS (2*220)                            | 440                              | 379                      | 425                | 425                    | 9.28               | 387                    | 9.10               | 0.18         |
| RAPS- B (2*220)                         | 440                              | 392                      | 437                | 438                    | 9.47               | 395                    | 9.41               | 0.06         |
| RAPS- C (2*220)                         | 440                              | 0                        | 0                  | 0                      | 0.00               | 0                      | 0.00               | 0.00         |
| <b>Sub Total (B)</b>                    | <b>1320</b>                      | <b>771</b>               | <b>862</b>         | <b>863</b>             | <b>18.75</b>       | <b>781</b>             | <b>18.50</b>       | <b>0.24</b>  |
| <b>C. NHPC</b>                          |                                  |                          |                    |                        |                    |                        |                    |              |
| Chamera I HPS (3*180)                   | 540                              | 534                      | 366                | 0                      | 1.69               | 71                     | 1.60               | 0.09         |
| Chamera II HPS (3*100)                  | 300                              | 300                      | 311                | 0                      | 0.96               | 40                     | 0.90               | 0.06         |
| Chamera III HPS (3*77)                  | 231                              | 154                      | 152                | 0                      | 0.60               | 25                     | 0.55               | 0.05         |
| Bairasuli HPS(3*60)                     | 180                              | 120                      | 123                | 0                      | 0.40               | 17                     | 0.36               | 0.04         |
| Salal-HPS (6*115)                       | 690                              | 87                       | 142                | 65                     | 2.18               | 91                     | 2.07               | 0.11         |
| Tanakpur-HPS (3*40)                     | 94                               | 26                       | 31                 | 32                     | 0.69               | 29                     | 0.62               | 0.07         |
| Uri-I HPS (4*120)                       | 480                              | 96                       | 201                | 20                     | 2.47               | 103                    | 2.29               | 0.18         |
| Uri-II HPS (4*60)                       | 240                              | 0                        | 0                  | 0                      | 0.00               | 0                      | 0.00               | 0.00         |
| Dhauliganga-HPS (4*70)                  | 280                              | 134                      | 69                 | 0                      | 1.27               | 53                     | 1.20               | 0.07         |
| Dulhasti-HPS (3*130)                    | 390                              | 386                      | 394                | 0                      | 2.51               | 105                    | 2.40               | 0.11         |
| Sewa-II HPS (3*40)                      | 120                              | 119                      | 81                 | 0                      | 0.22               | 9                      | 0.36               | -0.14        |
| Parbati 3 (4*130)                       | 520                              | 0                        | 0                  | 0                      | 0.00               | 0                      | 0.00               | 0.00         |
| <b>Sub Total (C)</b>                    | <b>4065</b>                      | <b>1955</b>              | <b>1870</b>        | <b>117</b>             | <b>13</b>          | <b>541</b>             | <b>12</b>          | <b>1</b>     |
| <b>D. SJVNL</b>                         |                                  |                          |                    |                        |                    |                        |                    |              |
| NJPC (6*250)                            | 1500                             | 1260                     | 1072               | 0                      | 6.41               | 267                    | 6.39               | 0.02         |
| Rampur HEP (4*68.67)                    | 275                              | 129                      | 296                | 0                      | 1.54               | 64                     | 1.56               | -0.01        |
| <b>Sub Total (D)</b>                    | <b>1775</b>                      | <b>1389</b>              | <b>1368</b>        | <b>0</b>               | <b>7.95</b>        | <b>331</b>             | <b>7.95</b>        | <b>0.01</b>  |
| <b>E. THDC</b>                          |                                  |                          |                    |                        |                    |                        |                    |              |
| Tehri HPS (4*250)                       | 1000                             | 996                      | 993                | 0                      | 9.17               | 382                    | 9.10               | 0.07         |
| Koteshwar HPS (4*100)                   | 400                              | 134                      | 292                | 90                     | 3.26               | 136                    | 3.20               | 0.06         |
| <b>Sub Total (E)</b>                    | <b>1400</b>                      | <b>1130</b>              | <b>1285</b>        | <b>90</b>              | <b>12.42</b>       | <b>518</b>             | <b>12.30</b>       | <b>0.12</b>  |
| <b>F. BBMB</b>                          |                                  |                          |                    |                        |                    |                        |                    |              |
| Bhakra HPS (3*108+2*126+6*157)          | 1514                             | 545                      | 1092               | 338                    | 13.18              | 549                    | 13.07              | 0.11         |
| Dehar HPS (6*165)                       | 990                              | 130                      | 330                | 0                      | 3.18               | 133                    | 3.13               | 0.05         |
| Pong HPS (6*66)                         | 396                              | 189                      | 312                | 0                      | 4.61               | 192                    | 4.54               | 0.08         |
| <b>Sub Total (F)</b>                    | <b>2900</b>                      | <b>864</b>               | <b>1734</b>        | <b>338</b>             | <b>20.98</b>       | <b>874</b>             | <b>20.73</b>       | <b>0.24</b>  |
| <b>G. IPP(s)/JV(s)</b>                  |                                  |                          |                    |                        |                    |                        |                    |              |
| ALLAIN DUHANGAN HPS(IPP) (2*96)         | 192                              | 0                        | 0                  | 0                      | 0.03               | 1                      | 0.33               | -0.29        |
| KARCHAM WANGTOO HPS(IPP) (4*250)        | 1000                             | 0                        | 602                | 0                      | 3.48               | 145                    | 3.48               | 0.00         |
| Malana Stg-II HPS (2*50)                | 100                              | 0                        | 0                  | 0                      | 0.00               | 0                      | 0.00               | 0.00         |
| Shree Cement TPS (2*150)                | 300                              | 0                        | 279                | 148                    | 5.46               | 228                    | 5.44               | 0.02         |
| Budhil HPS(IPP)                         | 70                               | 0                        | 0                  | 0                      | 0.00               | 0                      | 0.00               | 0.00         |
| <b>Sub Total (G)</b>                    | <b>1662</b>                      | <b>0</b>                 | <b>881</b>         | <b>148</b>             | <b>8.98</b>        | <b>374</b>             | <b>9.26</b>        | <b>-0.27</b> |
| <b>H. Total Regional Entities (A-G)</b> | <b>24434</b>                     | <b>16428</b>             | <b>16970</b>       | <b>9472</b>            | <b>285.44</b>      | <b>11893</b>           | <b>276.14</b>      | <b>9.29</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                              | 530          | 510           | 11.72         | 488                  |
|   | Guru Nanak Dev TPS(Bhatinda) (4*110)          | 440                               | 110          | 80            | 2.08          | 87                   |
|   | Guru Hargobind Singh TPS(L.mbt) (2*210+2*250) | 920                               | 360          | 337           | 8.31          | 346                  |
|   | Goindwal(GVK)                                 |                                   | 0            | 0             | 0.00          | 0                    |
|   | Rajpura (2*700)                               | 1400                              | 695          | 355           | 12.67         | 528                  |
|   | Talwandi Saboo (1*660)                        | 660                               | 349          | 347           | 8.74          | 364                  |
|   | <b>Thermal (Total)</b>                        | <b>4680</b>                       | <b>2044</b>  | <b>1629</b>   | <b>43.54</b>  | <b>1814</b>          |
|   | Total Hydro                                   | 1148                              | 505          | 181           | 7.46          | 311                  |
| <b>Total Punjab</b>   | <b>5828</b>                                   | <b>2549</b>                       | <b>1810</b>  | <b>51.00</b>  | <b>2125</b>   |                      |
| Haryana   | Panipat TPS (4*110+2*210+2*250)               | 1367                              | 466          | 618           | 12.40         | 517                  |
|   | DCRTPP (Yamuna nagar) (2*300)                 | 600                               | 533          | 472           | 11.87         | 495                  |
|   | Faridabad GPS (NTPC)                          | 432                               | 364          | 325           | 8.44          | 352                  |
|   | RGTPP (khedar) (IPP) (2*600)                  | 1200                              | 1137         | 718           | 21.77         | 907                  |
|   | Magnum Diesel (IPP)                           | 25                                | 0            | 0             | 0.00          | 0                    |
|   | Jhajjar(CLP) (2*660)                          | 1320                              | 622          | 381           | 13.11         | 546                  |
|   | <b>Thermal (Total)</b>                        | <b>4944</b>                       | <b>3122</b>  | <b>2514</b>   | <b>67.59</b>  | <b>2816</b>          |
|   | Total Hydro                                   | 62                                | 15           | 18            | 0.43          | 18                   |
|   | <b>Total Haryana</b>                          | <b>5006</b>                       | <b>3137</b>  | <b>2532</b>   | <b>68.02</b>  | <b>2834</b>          |
|   | Rajasthan                                     | kota TPS (2*110+2*195+3*210)      | 1240         | 1067          | 1002          | 25.81                |
| suratgarh TPS (6*250)   |   | 1500                              | 1220         | 1072          | 28.36         | 1181                 |
| Chabra TPS (3*250)  |   | 750                               | 629          | 593           | 14.69         | 612                  |
| Dholpur GPS (3*110)   |   | 330                               | 112          | 111           | 2.71          | 113                  |
| Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)                   |   | 271                               | 173          | 110           | 3.85          | 160                  |
| RAPS A (NPC) (1*100+1*200)  |   | 300                               | 180          | 180           | 3.92          | 163                  |
| Barsingsar (NLC) (2*125)  |   | 250                               | 189          | 190           | 4.38          | 183                  |
| Giral LTPS (2*125)  |   | 250                               | 0            | 0             | 0.00          | 0                    |
| Rajwest LTPS (IPP) (8*135)  |   | 1080                              | 710          | 858           | 18.27         | 761                  |
| VS LIGNITE LTPS (IPP) (1*135)                                     |   | 135                               | 0            | 0             | 0.00          | 0                    |
| Kalisindh Thermal(1*600)  |   | 600                               | 0            | 0             | 0.00          | 0                    |
| Kawai(Adani) (2*660)  |   | 1320                              | 1015         | 952           | 23.95         | 998                  |
| <b>Thermal (Total)</b>  |   | <b>8026</b>                       | <b>5295</b>  | <b>5068</b>   | <b>126</b>    | <b>5247</b>          |
| Total Hydro   |   | 550                               | 100          | 152           | 4.30          | 179                  |
| Wind power  |   | 2798                              | 158          | 207           | 5.42          | 226                  |
| Biomass   |   | 99                                | 13           | 13            | 0.34          | 14                   |
| Solar   |   | 730                               | 3            | 0             | 0.29          | 12                   |
| Renewable/Others (Total)  |   | 3627                              | 174          | 220           | 6.04          | 252                  |
| <b>Total Rajasthan</b>  | <b>12203</b>                                  | <b>5569</b>                       | <b>5440</b>  | <b>136.29</b> | <b>5679</b>   |                      |
| UP  | Anpara TPS (3*210+2*500)                      | 1630                              | 1291         | 1374          | 31.20         | 1300                 |
|   | Obra TPS (2*50+2*94+5*200)                    | 1194                              | 331          | 350           | 8.30          | 346                  |
|   | Paricha TPS (2*110+2*220+2*250)               | 1140                              | 783          | 771           | 18.90         | 788                  |
|   | Panki TPS (2*105)                             | 210                               | 0            | 0             | 0.00          | 0                    |
|   | Harduaganj TPS (1*60+1*105+2*250)             | 665                               | 453          | 229           | 9.70          | 404                  |
|   | Tanda TPS (NTPC) (4*110)                      | 440                               | 385          | 384           | 9.20          | 383                  |
|   | Roza TPS (IPP) (4*300)                        | 1200                              | 765          | 941           | 23.20         | 967                  |
|   | Anpara-C (IPP) (2*600)                        | 1200                              | 1003         | 1071          | 24.10         | 1004                 |
|   | Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)         | 450                               | 279          | 279           | 8.30          | 346                  |
|   | <b>Thermal (Total)</b>                        | <b>8129</b>                       | <b>5290</b>  | <b>5399</b>   | <b>132.90</b> | <b>5538</b>          |
|   | Vishnuparyag HPS (IPP)                        | 400                               | 80           | 70            | 1.26          | 53                   |
|   | Other Hydro                                   | 527                               | 155          | 42            | 3.43          | 143                  |
|   | Cogeneration                                  | 981                               | 800          | 800           | 19.00         | 792                  |
|   | <b>Total UP</b>                               | <b>10037</b>                      | <b>6325</b>  | <b>6311</b>   | <b>156.59</b> | <b>6472</b>          |
|   | Uttarakhand                                   | Total Hydro                       | 1398         | 592           | 332           | 10.31                |
| <b>Total Uttarakhand</b>  |   | <b>1398</b>                       | <b>592</b>   | <b>332</b>    | <b>10.31</b>  | <b>430</b>           |
| Delhi   | Raighat TPS (2*67.5)                          | 135                               | 40           | 41            | 0.97          | 40                   |
|   | Delhi Gas Turbine (6x30 + 3x34)               | 282                               | 161          | 160           | 3.81          | 159                  |
|   | Pragati Gas Turbine (2x104+ 1x122)            | 330                               | 0            | 0             | 0.00          | 0                    |
|   | Rithala GPS (3*36)                            | 95                                | 0            | 0             | 0.00          | 0                    |
|   | Bawana GPS (6*250)                            | 1370                              | 312          | 294           | 7.25          | 302                  |
|   | Badarpur TPS (NTPC) (3*95+2*210)              | 705                               | 360          | 336           | 7.92          | 330                  |
|   | <b>Thermal (Total)</b>                        | <b>2917</b>                       | <b>873</b>   | <b>831</b>    | <b>19.95</b>  | <b>831</b>           |
|   | <b>Total Delhi</b>                            | <b>2917</b>                       | <b>873</b>   | <b>831</b>    | <b>19.95</b>  | <b>831</b>           |
| HP  | Baspa HPS (IPP) (2*150)                       | 300                               | 79           | 0             | 0.86          | 36                   |
|   | Malana HPS (IPP) (2*43)                       | 86                                | 0            | 0             | 0.18          | 8                    |
|   | Other Hydro                                   | 728                               | 182          | 74            | 2.95          | 123                  |
|   | <b>Total HP</b>                               | <b>1114</b>                       | <b>261</b>   | <b>74</b>     | <b>3.98</b>   | <b>166</b>           |
| J & K   | Baqilhar HPS (IPP) (3*150)                    | 450                               | 150          | 120           | 3.27          | 136                  |
|   | Other Hydro/IPP                               | 436                               | 79           | 20            | 1.14          | 47                   |
|   | Gas/Diesel/Others                             | 209                               | 0            | 0             | 0.00          | 0                    |
|   | <b>Total J &amp; K</b>                        | <b>1094</b>                       | <b>229</b>   | <b>140</b>    | <b>4.41</b>   | <b>184</b>           |
| <b>Total State Control Area Generation</b>                        |   | <b>39597</b>                      | <b>19535</b> | <b>17470</b>  | <b>450.54</b> | <b>18720</b>         |
| <b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b> |   |                                   | <b>4110</b>  | <b>3251</b>   | <b>118.80</b> | <b>4950</b>          |
| <b>Total Regional Availability(Gross)</b>                         |   | <b>64032</b>                      | <b>40615</b> | <b>30193</b>  | <b>854.78</b> | <b>35563</b>         |

#### IV. Total Hydro Generation:

|                             |              |             |             |              |             |
|-----------------------------|--------------|-------------|-------------|--------------|-------------|
| Regional Entities Hydro     | 11432        | 6859        | 545         | 57.86        | 2411        |
| State Control Area Hydro    | 5684         | 1857        | 939         | 35.58        | 1430        |
| <b>Total Regional Hydro</b> | <b>17116</b> | <b>8716</b> | <b>1484</b> | <b>93.44</b> | <b>3841</b> |

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

| Element                    | Peak(19:00 Hrs) | Off Peak(03:00 Hrs) | Maximum Interchange (MW) |        | Energy (MU)   |             | Net Energy MU |
|----------------------------|-----------------|---------------------|--------------------------|--------|---------------|-------------|---------------|
|                            | MW              | MW                  | Import                   | Export | Import        | Export      |               |
| Vindhychal B/B             | 100             | -500                | 200                      | 500    | 1.81          | -3.20       | 5.01          |
| Gwalior-Agra (D/C)         | 749             | 1016                | 1643                     | 0      | 27.33         | 0.00        | 27.33         |
| Zerda-Kankroli             | -38             | -108                | 77                       | 168    | 0.00          | 0.75        | -0.75         |
| Zerda-Bhinmal              | 63              | -36                 | 300                      | 86     | 1.33          | 0.00        | 1.33          |
| Malanpur-Auraiya           | -185            | -110                | 0                        | 225    | 0.00          | 3.25        | -3.25         |
| Badod-Kota/Morak           | 32              | -82                 | 50                       | 69     | 1.06          | 0.30        | 0.76          |
| Mundra-Mohindergarh(HVDC)  | 1801            | 1598                | 1804                     | 0      | 42.66         | 0.00        | 42.66         |
| Vindhychal - Rihand        | 505             | 342                 | 505                      | 0      | 11.43         | 0.00        | 11.43         |
| <b>Sub Total WR</b>        | <b>3027</b>     | <b>2120</b>         |                          |        | <b>85.63</b>  | <b>1.11</b> | <b>84.52</b>  |
| Pusauli Bypass             | 100             | 100                 | 100                      | 0      | 2.40          | 0.00        | 2.40          |
| MZP- GKP (D/C)             | 17              | 99                  | 275                      | 36     | 2.33          | 0.00        | 2.33          |
| Patna-Balia(D/C)           | 716             | 621                 | 866                      | 0      | 17.81         | 0.00        | 17.81         |
| B'Sharif-Balia (D/C)       | -30             | -125                | 96                       | 109    | 0.00          | 1.14        | -1.14         |
| Pusauli-Balia              | -9              | 42                  | 46                       | 25     | 0.00          | 0.07        | -0.07         |
| Gaya-Fatehpur (765 Kv)     | 185             | 280                 | 604                      | 0      | 9.39          | 0.00        | 9.39          |
| Pusauli-Sahupuri           | 102             | 114                 | 164                      | 0      | 2.95          | 0.00        | 2.95          |
| K'nasa-Sahupuri            | 0               | 0                   | 0                        | 0      | 0.00          | 0.00        | 0.00          |
| Son Ngr-Rihand             | 0               | 0                   | 0                        | 0      | 0.00          | 0.00        | 0.00          |
| Garhwa-Rihand              | 0               | 0                   | 0                        | 0      | 0.00          | 0.00        | 0.00          |
| Sasaram - Fatehpur(765 KV) | 2               | 0                   | 125                      | 10     | 0.60          | 0.00        | 0.60          |
| <b>Sub Total ER</b>        | <b>1083</b>     | <b>1131</b>         |                          |        | <b>35.48</b>  | <b>1.21</b> | <b>34.28</b>  |
| <b>Total IR Exch</b>       | <b>4110</b>     | <b>3251</b>         |                          |        | <b>121.11</b> | <b>2.31</b> | <b>118.80</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 |
| 28.33 | 0.21                  | 28.54 | 9.91                    | -5.47      | 11.70                    | 14.78      | 0.22          | -0.22      |

| 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 |
| 50.36                  | 66.53                   | 116.89 | 34.28                | 84.52      | 118.80 | -16.09         | 18.00      | 1.91  |

**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                | 0.80  | 4.92  | 21.76 | 66.47 | 61.26      | 10.22       | 5.89        | 0.91   | NA     |

| Frequency (Hz) |          |         |          | Average Frequency | Frequency Variation Index | Std. Dev. | Frequency in 15 Min Block |          |
|----------------|----------|---------|----------|-------------------|---------------------------|-----------|---------------------------|----------|
| Maximum        |          | Minimum |          |                   |                           |           | MAX (Hz)                  | MIN (Hz) |
| Freq           | Time     | Freq    | Time     | Hz                |                           |           |                           |          |
| 50.31          | 00:43:12 | 49.63   | 03:07:12 | 49.96             | 0.11                      | 0.10      | 50.20                     | 49.85    |

**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                | 413         | 00:00 | 406          | 09:33 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Gorakhpur  | 400                | 412         | 02:03 | 395          | 18:10 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Bareilly   | 400                | 424         | 03:19 | 404          | 12:18 | 0.0                    | 0.0     | 9.3     | 0.0     |
| Kanpur     | 400                | 423         | 02:59 | 405          | 10:08 | 0.0                    | 0.0     | 8.7     | 0.0     |
| Dadri      | 400                | 423         | 03:01 | 404          | 11:23 | 0.2                    | 0.2     | 7.2     | 0.0     |
| Ballabgarh | 400                | 429         | 03:02 | 409          | 09:36 | 0.0                    | 0.0     | 32.7    | 0.0     |
| Bawana     | 400                | 428         | 03:00 | 410          | 13:46 | 11.6                   | 11.6    | 28.7    | 0.0     |
| Bassi      | 400                | 431         | 05:02 | 401          | 07:38 | 0.0                    | 0.0     | 29.4    | 0.2     |
| Hissar     | 400                | 417         | 02:51 | 400          | 06:54 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Moga       | 400                | 422         | 00:57 | 405          | 12:15 | 0.0                    | 0.0     | 7.9     | 0.0     |
| Abdullapur | 400                | 426         | 03:00 | 396          | 05:54 | 0.0                    | 0.0     | 18.5    | 0.0     |
| Nalagarh   | 400                | 428         | 02:55 | 402          | 15:38 | 0.0                    | 0.0     | 37.1    | 0.0     |
| Kishenpur  | 400                | 414         | 13:01 | 391          | 07:47 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Wagoora    | 400                | 395         | 13:01 | 362          | 18:42 | 66.9                   | 99.7    | 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                | 782         | 03:18 | 748          | 07:32 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Balia    | 765                | 786         | 05:05 | 760          | 09:36 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Moga     | 765                | 800         | 03:00 | 768          | 06:56 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Agra     | 765                | 796         | 03:16 | 760          | 07:31 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Bhiwani  | 765                | 805         | 00:00 | 768          | 07:39 | 0.0                    | 0.0     | 8.2     | 0.0     |
| Unnao    | 765                | 772         | 03:15 | 742          | 12:16 | 0.0                    | 0.0     | 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   | 494.65             | 891.94      | 498.42    | 1029.80     | 148.27                     | 394.68                    |
| Pong              | 426.72     | 384.05   | 403.15             | 296.79      | 409.83    | 494.27      | 70.91                      | 328.96                    |
| Tehri             | 829.79     | 740.04   | 803.75             | 685.04      | 806.05    | 724.19      | 36.72                      | 219.00                    |
| Koteshwar         | 612.50     | 598.50   | 609.03             | 4.10        | 610.23    | 4.69        | 219.00                     | 216.00                    |
| Chamera-I         | 760.00     | 748.75   | 759.26             | 29.74       | 757.21    | 23.16       | 41.75                      | 45.27                     |
| 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   | 503.77             | 2.72        | 509.94    | 2.59        | 39.50                      | 129.66                    |

\* NA: Not Available

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

| State        | Off- Peak Hours (03:00 Hrs) |            |           | Peak Hours (19:00 Hrs) |             |           | Day Energy (MU) |                 |              |
|--------------|-----------------------------|------------|-----------|------------------------|-------------|-----------|-----------------|-----------------|--------------|
|              | Bilateral (MW)              | IEX (MW)   | PXIL (MW) | Bilateral (MW)         | IEX (MW)    | PXIL (MW) | Bilateral (MU)  | IEX / PXIL (MU) | Total (MU)   |
| Punjab       | -411                        | 134        | 0         | -380                   | 7           | 0         | -8.64           | 1.35            | -7.29        |
| Delhi        | -893                        | -10        | -15       | -490                   | 451         | -5        | -11.16          | 5.82            | -5.34        |
| Haryana      | -947                        | 153        | 0         | -1035                  | 105         | 0         | -25.08          | -0.10           | -25.18       |
| HP           | 531                         | -55        | 0         | 502                    | -129        | 0         | 13.45           | -2.83           | 10.62        |
| J&K          | 683                         | -5         | 0         | 485                    | 125         | 0         | 13.17           | 2.00            | 15.17        |
| CHD          | -31                         | 0          | 0         | 0                      | 19          | 0         | -0.25           | 0.66            | 0.42         |
| Rajasthan    | 486                         | 555        | 2         | 486                    | 450         | 2         | 15.62           | 15.03           | 30.66        |
| UP           | 63                          | 0          | 0         | 89                     | 0           | 0         | -1.33           | 0.00            | -1.33        |
| Uttarakhand  | 290                         | 157        | 28        | 245                    | 432         | 18        | 6.26            | 8.79            | 15.05        |
| <b>Total</b> | <b>-229</b>                 | <b>928</b> | <b>14</b> | <b>-99</b>             | <b>1460</b> | <b>15</b> | <b>2.03</b>     | <b>30.73</b>    | <b>32.76</b> |

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

| State       | Bilateral (MW) |         | IEX (MW) |         | PXIL (MW) |         |
|-------------|----------------|---------|----------|---------|-----------|---------|
|             | Maximum        | Minimum | Maximum  | Minimum | Maximum   | Minimum |
| Punjab      | -329           | -411    | 246      | 0       | 0         | 0       |
| Delhi       | -21            | -893    | 665      | -10     | -5        | -15     |
| Haryana     | -947           | -1163   | 156      | -634    | 0         | 0       |
| HP          | 603            | 478     | 0        | -594    | 0         | 0       |
| J&K         | 683            | 437     | 222      | -57     | 0         | 0       |
| CHD         | 0              | -31     | 68       | 0       | 0         | 0       |
| Rajasthan   | 841            | 486     | 1091     | 208     | 2         | 2       |
| UP          | 126            | -274    | 0        | 0       | 0         | 0       |
| Uttarakhand | 290            | 245     | 450      | 124     | 48        | 18      |

**XI. System Constraints:****XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 17.01.2015 :****XIV. Synchronisation of new generating units :**  
0.00**XV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :****XVI. Tripping of lines in pooling stations :****XVII. Complete generation loss in a generating station :**