

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 19.12.2012

Date of Reporting : 20.12.2012

### I. Regional Availability/Demand:

| Evening Peak (19:00 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 |
| 32860                       | 3282     | 36142       | 50.00      | 26635                   | 665      | 27300       | 50.34      | 710.1               | 58.80    |

\* 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) | UI [OD:(+ve), UD: (-ve)] |                     |
|--------------|--|--------------|---------------------|---------------|-----------------------------|---------------------------|----------------|--------------------------|---------------------|
|              | Thermal                                  | Hydro        | Renewable/others \$ | Total         |                             |                           |                | Consumption<br>(Net MU)  | Shortages *<br>(MU) |
| Punjab       | 47.25                                    | 10.29        |                     | 57.54         | 33.96                       | 34.37                     | 0.41           | 91.91                    | 0.00                |
| Haryana      | 56.29                                    | 0.60         |                     | 56.89         | 35.73                       | 37.61                     | 1.88           | 94.50                    | 11.35               |
| Rajasthan    | 90.83                                    | 5.44         | 4.24                | 100.51        | 67.27                       | 67.04                     | -0.23          | 167.55                   | 1.60                |
| Delhi        | 25.73                                    |              |                     | 25.73         | 32.92                       | 31.74                     | -1.18          | 57.47                    | 0.66                |
| UP           | 113.42                                   | 3.56         | 14.40               | 131.38        | 71.31                       | 70.71                     | -0.60          | 202.09                   | 42.40               |
| Uttarakhand  |  | 8.90         |                     | 8.90          | 19.13                       | 21.67                     | 2.55           | 30.57                    | 1.03                |
| HP           |  | 5.31         |                     | 5.31          | 18.84                       | 18.96                     | 0.12           | 24.26                    | 0.06                |
| J & K        |  | 6.73         | 0.00                | 6.73          | 29.11                       | 31.41                     | 2.30           | 38.14                    | 1.70                |
| Chandigarh   |  |              |                     | 0.00          | 3.46                        | 3.61                      | 0.15           | 3.61                     | 0.00                |
| <b>Total</b> | <b>333.52</b>                            | <b>40.82</b> | <b>18.64</b>        | <b>392.98</b> | <b>311.71</b>               | <b>317.11</b>             | <b>5.40</b>    | <b>710.09</b>            | <b>58.80</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 |            |            |                     | Day Energy MU       |  |
|--------------|-----------------------------|-------------|-------------|---------------------|-------------------------|------------|------------|---------------------|---------------------|--|
|              | Demand Met                  | Shortage    | UI          | STOA/PX transaction | Demand Met              | Shortage   | UI         | STOA/PX transaction | STOA/PX transaction |  |
| Punjab       | 4645                        | 0           | -142        | -194                | 3178                    | 0          | 151        | 66                  | -4.97               |  |
| Haryana      | 4753                        | 668         | 71          | 208                 | 3477                    | 0          | 114        | -166                | -1.80               |  |
| Rajasthan    | 7125                        | 258         | 126         | 425                 | 6813                    | 0          | 19         | 505                 | 25.96               |  |
| Delhi        | 3053                        | 0           | -166        | -1398               | 1315                    | 0          | 11         | -2023               | -37.53              |  |
| UP           | 8716                        | 2256        | -259        | -121                | 8344                    | 665        | 15         | -105                | -6.75               |  |
| Uttarakhand  | 1573                        | 0           | 76          | 431                 | 1082                    | 0          | 133        | 428                 | 9.07                |  |
| HP           | 1201                        | 0           | -12         | 252                 | 779                     | 0          | 17         | 337                 | 6.96                |  |
| J&K          | 1616                        | 100         | -280        | 393                 | 1561                    | 0          | 62         | 496                 | 9.43                |  |
| Chandigarh   | 178                         | 0           | -24         | 0                   | 86                      | 0          | -8         | -30                 | -0.28               |  |
| <b>Total</b> | <b>32860</b>                | <b>3282</b> | <b>-609</b> | <b>-4</b>           | <b>26635</b>            | <b>665</b> | <b>514</b> | <b>-491</b>         | <b>0.10</b>         |  |

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

### 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) | UI [OG:(+ve), UG: (-ve)] |              |
|---|----------------------------------|--------------------------|--------------------|------------------------|--------------------|------------------------|--------------------------|--------------|
|   |                                  |                          |                    |                        |                    |                        | Schedule<br>Net MU       | UI<br>Net MU |
| <b>A. NTPC</b>                          |                                  |                          |                    |                        |                    |                        |                          |              |
| Singrauli STPS                          | 2000                             | 1947                     | 2084               | 2009                   | 47.04              | 1960                   | 46.72                    | 0.32         |
| Rihand I STPS                           | 1000                             | 933                      | 993                | 1005                   | 22.39              | 933                    | 22.39                    | 0.00         |
| Rihand II STPS                          | 1000                             | 975                      | 1030               | 997                    | 23.27              | 969                    | 23.40                    | -0.13        |
| Rihand III STPS                         | 500                              | 326                      | 390                | 383                    | 7.42               | 309                    | 7.84                     | -0.42        |
| Dadri I STPS                            | 840                              | 810                      | 877                | 649                    | 18.01              | 750                    | 18.00                    | 0.01         |
| Dadri II STPS                           | 980                              | 963                      | 1034               | 752                    | 21.12              | 880                    | 21.95                    | -0.83        |
| Unchahar I TPS                          | 420                              | 407                      | 435                | 385                    | 9.50               | 396                    | 9.53                     | -0.02        |
| Unchahar II TPS                         | 420                              | 399                      | 441                | 369                    | 9.20               | 383                    | 9.16                     | 0.04         |
| Unchahar III TPS                        | 210                              | 93                       | 0                  | 181                    | 1.72               | 72                     | 1.78                     | -0.06        |
| ISTPP (Jhajhar)                         | 1500                             | 960                      | 538                | 589                    | 17.40              | 725                    | 17.48                    | -0.08        |
| Dadri GPS                               | 830                              | 844                      | 422                | 333                    | 9.20               | 383                    | 9.93                     | -0.73        |
| Anta GPS                                | 419                              | 415                      | 241                | 183                    | 5.36               | 223                    | 5.04                     | 0.32         |
| Auraiya GPS                             | 663                              | 666                      | 314                | 247                    | 6.94               | 289                    | 6.70                     | 0.24         |
| <b>Sub Total (A)</b>                    | <b>10782</b>                     | <b>9739</b>              | <b>8799</b>        | <b>8082</b>            | <b>198.56</b>      | <b>8273</b>            | <b>199.91</b>            | <b>-1.35</b> |
| <b>B. NPC</b>                           |                                  |                          |                    |                        |                    |                        |                          |              |
| NAPS                                    | 440                              | 120                      | 162                | 159                    | 3.31               | 138                    | 2.88                     | 0.43         |
| RAPS- B                                 | 440                              | 208                      | 231                | 234                    | 5.01               | 209                    | 4.99                     | 0.02         |
| RAPS- C                                 | 440                              | 440                      | 474                | 477                    | 10.24              | 427                    | 10.56                    | -0.32        |
| <b>Sub Total (B)</b>                    | <b>1320</b>                      | <b>768</b>               | <b>867</b>         | <b>870</b>             | <b>18.56</b>       | <b>773</b>             | <b>18.43</b>             | <b>0.13</b>  |
| <b>C. NHPC</b>                          |                                  |                          |                    |                        |                    |                        |                          |              |
| Chamera I HPS                           | 540                              | 550                      | 270                | 0                      | 1.77               | 74                     | 1.71                     | 0.05         |
| Chamera II HPS                          | 300                              | 303                      | 200                | 0                      | 1.42               | 59                     | 1.39                     | 0.03         |
| Chamera III HPS                         | 231                              | 231                      | 66                 | 0                      | 0.76               | 32                     | 0.72                     | 0.05         |
| Bairasuil HPS                           | 180                              | 182                      | 80                 | 0                      | 0.61               | 26                     | 0.52                     | 0.10         |
| Salai-HPS                               | 690                              | 118                      | 225                | 67                     | 3.06               | 128                    | 2.92                     | 0.14         |
| Tanakpur-HPS                            | 94                               | 29                       | 31                 | 24                     | 0.71               | 30                     | 0.72                     | -0.01        |
| Uri-HPS                                 | 480                              | 99                       | 223                | 38                     | 3.35               | 140                    | 3.43                     | -0.08        |
| Dhauliganga-HPS                         | 280                              | 158                      | 200                | 0                      | 1.20               | 50                     | 1.14                     | 0.06         |
| Dulhasi-HPS                             | 390                              | 388                      | 156                | 0                      | 2.91               | 121                    | 2.81                     | 0.10         |
| Sewa-II HPS                             | 120                              | 80                       | 85                 | 0                      | 0.45               | 19                     | 0.42                     | 0.03         |
| <b>Sub Total (C)</b>                    | <b>3305</b>                      | <b>2138</b>              | <b>1536</b>        | <b>129</b>             | <b>16.25</b>       | <b>677</b>             | <b>15.79</b>             | <b>0.46</b>  |
| <b>D.NJPC</b>                           |                                  |                          |                    |                        |                    |                        |                          |              |
| Nathpa Jhakri                           | 1500                             | 1605                     | 933                | 0                      | 7.28               | 303                    | 7.06                     | 0.21         |
| <b>Sub Total (D)</b>                    | <b>1500</b>                      | <b>1605</b>              | <b>933</b>         | <b>0</b>               | <b>7.28</b>        | <b>303</b>             | <b>7.06</b>              | <b>0.21</b>  |
| <b>E. THDC</b>                          |                                  |                          |                    |                        |                    |                        |                          |              |
| Tehri HPS                               | 1000                             | 1050                     | 903                | 0                      | 8.40               | 350                    | 8.20                     | 0.20         |
| Koteshwar HPS                           | 400                              | 200                      | 174                | 86                     | 3.10               | 129                    | 3.00                     | 0.10         |
| <b>Sub Total (E)</b>                    | <b>1400</b>                      | <b>1250</b>              | <b>1077</b>        | <b>86</b>              | <b>11.50</b>       | <b>479</b>             | <b>11.20</b>             | <b>0.30</b>  |
| <b>F. BBMB</b>                          |                                  |                          |                    |                        |                    |                        |                          |              |
| Bhakra HPS                              | 1480                             | 530                      | 1138               | 422                    | 13.41              | 559                    | 12.72                    | 0.69         |
| Dehar HPS                               | 990                              | 146                      | 495                | 0                      | 3.78               | 158                    | 3.50                     | 0.28         |
| Pong HPS                                | 396                              | 275                      | 366                | 60                     | 6.88               | 287                    | 5.01                     | 1.87         |
| <b>Sub Total (F)</b>                    | <b>2866</b>                      | <b>950</b>               | <b>1999</b>        | <b>482</b>             | <b>24.07</b>       | <b>1003</b>            | <b>21.23</b>             | <b>2.84</b>  |
| <b>G. IPP(s)/JV(s)</b>                  |                                  |                          |                    |                        |                    |                        |                          |              |
| ADHPL HPS(IPP)                          | 192                              | 0                        | 0                  | 0                      | 0.52               | 22                     | 0.52                     | 0.01         |
| KWHEP HPS(IPP)                          | 1000                             | 0                        | 140                | 0                      | 4.09               | 171                    | 3.88                     | 0.21         |
| Malana Stg-II HPS                       | 100                              | 0                        | 25                 | 0                      | 0.21               | 9                      | 0.18                     | 0.03         |
| Shree Cement TPS                        | 300                              | 0                        | 141                | 113                    | 2.74               | 114                    | 3.45                     | -0.72        |
| 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>306</b>         | <b>113</b>             | <b>7.57</b>        | <b>315</b>             | <b>8.03</b>              | <b>-0.47</b> |
| <b>H. Total Regional Entities (A-G)</b> | <b>22836</b>                     | <b>16450</b>             | <b>15517</b>       | <b>9762</b>            | <b>283.78</b>      | <b>11824</b>           | <b>281.66</b>            | <b>2.13</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)   | 1260                              | 950          | 860          | 22.10         | 921                  |
|   | Guru Nanak Dev TPS(Bhatinda)    | 440                               | 320          | 105          | 4.64          | 193                  |
|   | Guru Hargobind Singh TPS(L.mbt) | 920                               | 949          | 851          | 20.51         | 855                  |
|   | Thermal (Total)                 | 2620                              | 2219         | 1816         | 47.25         | 1969                 |
|   | Total Hydro                     | 1148                              | 389          | 369          | 10.29         | 429                  |
| <b>Total Punjab</b>   | <b>3768</b>                     | <b>2608</b>                       | <b>2185</b>  | <b>57.54</b> | <b>2397</b>   |                      |
| Haryana   | Panipat TPS                     | 1367                              | 949          | 937          | 22.22         | 926                  |
|   | DCRTPP (Yamuna nagar)           | 600                               | 282          | 280          | 6.69          | 279                  |
|   | Faridabad GPS (NTPC)            | 432                               | 168          | 160          | 3.96          | 165                  |
|   | RGTPP (khedar) (IPP)            | 1200                              | 581          | 531          | 13.16         | 548                  |
|   | Magnum Diesel (IPP)             | 25                                | 0            | 0            | 0.00          | 0                    |
|   | Jhajjar(CLP)                    | 1320                              | 421          | 379          | 10.27         | 428                  |
|   | Thermal (Total)                 | 4944                              | 196          | 2287         | 56.29         | 2345                 |
|   | Total Hydro                     | 62                                | 28           | 28           | 0.60          | 25                   |
| <b>Total Haryana</b>  | <b>5006</b>                     | <b>224</b>                        | <b>2315</b>  | <b>56.89</b> | <b>2371</b>   |                      |
| Rajasthan   | kota TPS                        | 1240                              | 1178         | 1175         | 27.65         | 1152                 |
|   | suratgarh TPS                   | 1500                              | 1273         | 1134         | 29.64         | 1235                 |
|   | Chabra TPS                      | 500                               | 451          | 400          | 9.49          | 395                  |
|   | Dholpur GPS                     | 330                               | 141          | 139          | 3.24          | 135                  |
|   | Ramgarh GPS                     | 111                               | 38           | 38           | 1.06          | 44                   |
|   | RAPS A (NPC)                    | 300                               | 197          | 197          | 4.41          | 184                  |
|   | Barsingar (NLC)                 | 250                               | 212          | 208          | 5.00          | 208                  |
|   | Giral LTPS                      | 250                               | 0            | 48           | 0.19          | 8                    |
|   | Rajwest LTPS (IPP)              | 540                               | 405          | 482          | 10.15         | 423                  |
|   | VSLP LTPS (IPP)                 | 135                               | 0            | 0            | 0.00          | 0                    |
|   | Thermal (Total)                 | 5156                              | 3895         | 3821         | 90.83         | 3784                 |
|   | Total Hydro                     | 550                               | 318          | 211          | 5.44          | 227                  |
|   | Wind power                      | 2191                              | 54           | 370          | 3.48          | 145                  |
|   | Biomass                         | 91                                | 26           | 26           | 0.63          | 26                   |
|   | Solar                           | 201                               | 3            | 0            | 0.13          | 5                    |
|   | Renewable/Others (Total)        | 2483                              | 80           | 396          | 4.24          | 177                  |
|   | <b>Total Rajasthan</b>          | <b>8189</b>                       | <b>4293</b>  | <b>4428</b>  | <b>100.51</b> | <b>4188</b>          |
|   | UP                              | Anpara TPS                        | 1630         | 1392         | 1503          | 32.10                |
| Obra TPS  |                                 | 1382                              | 515          | 494          | 11.10         | 463                  |
| Paricha TPS   |                                 | 890                               | 691          | 680          | 14.40         | 600                  |
| Panki TPS   |                                 | 210                               | 65           | 70           | 1.50          | 63                   |
| Harduaganj TPS  |                                 | 665                               | 50           | 271          | 3.00          | 125                  |
| Tanda TPS (NTPC)  |                                 | 440                               | 290          | 297          | 7.32          | 305                  |
| Roza TPS (IPP)  |                                 | 1200                              | 1096         | 855          | 23.85         | 994                  |
| Anpara-C (IPP)  |                                 | 1200                              | 466          | 459          | 11.06         | 461                  |
| Bajaj Energy Pvt.Ltd(IPP) TPS                                     |                                 | 450                               | 405          | 324          | 9.09          | 379                  |
| Thermal (Total)   |                                 | 8067                              | 4970         | 4953         | 113.42        | 4726                 |
| Vishnuparyag HPS (IPP)  |                                 | 400                               | 0            | 0            | 0.00          | 0                    |
| Other Hydro   |                                 | 527                               | 127          | 128          | 3.56          | 148                  |
| Cogeneration  |                                 | 981                               | 600          | 600          | 14.40         | 600                  |
| <b>Total UP</b>   |                                 | <b>9975</b>                       | <b>5697</b>  | <b>5681</b>  | <b>131.38</b> | <b>5474</b>          |
| Uttarakhand   |                                 | Total Hydro                       | 1303         | 478          | 279           | 8.90                 |
|   | <b>Total Uttarakhand</b>        | <b>1303</b>                       | <b>478</b>   | <b>279</b>   | <b>8.90</b>   | <b>371</b>           |
| Delhi   | Raighat TPS                     | 135                               | 105          | 107          | 2.43          | 101                  |
|   | Delhi Gas Turbine               | 282                               | 140          | 83           | 2.49          | 104                  |
|   | Pragati Gas Turbine             | 330                               | 319          | 267          | 7.58          | 316                  |
|   | Rithala GPS                     | 108                               | 21           | 21           | 0.41          | 17                   |
|   | Bawana GPS                      | 677                               | 218          | 229          | 5.26          | 219                  |
|   | Badarpur TPS (NTPC)             | 705                               | 405          | 345          | 7.56          | 315                  |
|   | Thermal (Total)                 | 2237                              | 1208         | 1052         | 25.73         | 1072                 |
| <b>Total Delhi</b>  | <b>2237</b>                     | <b>1208</b>                       | <b>1052</b>  | <b>25.73</b> | <b>1072</b>   |                      |
| HP  | Baspa HPS (IPP)                 | 330                               | 0            | 0            | 1.28          | 53                   |
|   | Malana HPS (IPP)                | 86                                | 38           | 0            | 0.26          | 11                   |
|   | Other Hydro                     | 589                               | 179          | 118          | 3.77          | 157                  |
|   | <b>Total HP</b>                 | <b>1005</b>                       | <b>217</b>   | <b>118</b>   | <b>5</b>      | <b>221</b>           |
| J & K   | Baglihar HPS (IPP)              | 450                               | 146          | 146          | 3.55          | 148                  |
|   | Other Hydro                     | 323                               | 120          | 175          | 3.18          | 133                  |
|   | Gas/Diesel/Others               | 183                               | 0            | 0            | 0.00          | 0                    |
|   | <b>Total J &amp; K</b>          | <b>956</b>                        | <b>266</b>   | <b>321</b>   | <b>6.73</b>   | <b>280</b>           |
| <b>Total State Control Area Generation</b>                        |                                 | <b>32439</b>                      | <b>14991</b> | <b>16379</b> | <b>392.98</b> | <b>16374</b>         |
| <b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b> |                                 |                                   | <b>1783</b>  | <b>1384</b>  | <b>44.92</b>  | <b>1872</b>          |
| <b>Total Regional Availability(Gross)</b>                         |                                 | <b>55275</b>                      | <b>32291</b> | <b>27525</b> | <b>721.67</b> | <b>30070</b>         |

#### IV. Total Hydro Generation:

|                             |              |             |             |               |             |
|-----------------------------|--------------|-------------|-------------|---------------|-------------|
| Regional Entities Hydro     | 10364        | 5710        | 697         | 63.93         | 2664        |
| State Control Area Hydro    | 5368         | 1823        | 1454        | 40.82         | 1701        |
| <b>Total Regional Hydro</b> | <b>15731</b> | <b>7533</b> | <b>2151</b> | <b>104.74</b> | <b>4364</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       | Import       | Export |               |
| Vindhychal B/B            | -150            | -400        | 0                   | 400    | 0.00                     | 6.99         | -6.99        |        |               |
| Gwalior-Agra (D/C)        | 280             | 75          | 508                 | 0      | 1.39                     | 0.00         | 1.39         |        |               |
| Zerda-Kankroli            | -174            | -130        | 77                  | 215    | 0.00                     | 1.99         | -1.99        |        |               |
| Zerda-Bhinmal             | -66             | -49         | 199                 | 158    | 0.41                     | 0.00         | 0.41         |        |               |
| Malanpur-Auraiya          | -254            | -199        | 0                   | 254    | 0.00                     | 4.15         | -4.15        |        |               |
| Badod-Kota/Morak          | -124            | -94         | 32                  | 124    | 0.00                     | 1.56         | -1.56        |        |               |
| Mundra-Mohindergarh(HVDC) | 926             | 650         | 931                 | 0      | 19.56                    | 0.00         | 19.56        |        |               |
| <b>Sub Total WR</b>       | <b>438</b>      | <b>-147</b> |                     |        | <b>21.36</b>             | <b>14.69</b> | <b>6.67</b>  |        |               |
| Pusauli Bypass            | -32             | -149        | 13                  | 185    | 0.04                     | 1.72         | -1.68        |        |               |
| MZP- GKP (D/C)            | 374             | 500         | 602                 | 0      | 11.15                    | 0.00         | 11.15        |        |               |
| Patna-Balia(D/C)          | 597             | 662         | 837                 | 0      | 17.03                    | 0.00         | 17.03        |        |               |
| B'Sharif-Balia (D/C)      | 123             | 198         | 272                 | 0      | 5.20                     | 0.00         | 5.20         |        |               |
| Barh - Balia(D/C)         | 0               | 0           | 0                   | 0      | 0.00                     | 0.00         | 0.00         |        |               |
| Pusauli-Balia             | 44              | 10          | 44                  | 0      | 0.25                     | 0.00         | 0.25         |        |               |
| Gaya-Fatehpur (765 Kv)    | 139             | 216         | 272                 | 0      | 4.85                     | 0.00         | 4.85         |        |               |
| Pusauli-Sahupuri          | 137             | 126         | 161                 | 0      | 2.50                     | 0.00         | 2.50         |        |               |
| K'nasa-Sahupuri           | 0               | 0           | 0                   | 0      | 0.00                     | 0.00         | 0.00         |        |               |
| Son Ngr-Rihand            | -37             | -32         | 0                   | 48     | 0.00                     | 1.04         | -1.04        |        |               |
| Garhwa-Rihand             | 0               | 0           | 0                   | 0      | 0.00                     | 0.00         | 0.00         |        |               |
| <b>Sub Total ER</b>       | <b>1345</b>     | <b>1531</b> |                     |        | <b>41.01</b>             | <b>2.77</b>  | <b>38.25</b> |        |               |
| <b>Total IR Exch</b>      | <b>1783</b>     | <b>1384</b> |                     |        | <b>62.37</b>             | <b>17.46</b> | <b>44.92</b> |        |               |

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

| ISGS/LT Schedule (MU)         |            |       | Bilateral Schedule (MU) |            | Power Exchange Shdl (MU) |            | Wheeling (MU) |            |
|-------------------------------|------------|-------|-------------------------|------------|--------------------------|------------|---------------|------------|
| ER                            | Bhutan     | Total | Through ER              | Through WR | Through ER               | Through WR | Through ER    | Through WR |
| 43.90                         | 0.28       | 44.18 | 8.27                    | -21.07     | -0.02                    | 7.02       | -2.60         | 2.82       |
| <b>Total IR Schedule (MU)</b> |            |       |                         |            |                          |            |               |            |
| Through ER                    | Through WR | Total | Through ER              | Through WR | Total                    | Through ER | Through WR    | Total      |
| 49.83                         | -3.80      | 46.03 | 38.25                   | 6.67       | 44.92                    | -11.58     | 10.47         | -1.12      |

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

| <48.80                        | <49.0 | <49.20  | <49.50 | <49.7             | 49.5 - 50.2               | 49.7 - 50.2 | > 50.00                   | > 50.2   |
|-------------------------------|-------|---------|--------|-------------------|---------------------------|-------------|---------------------------|----------|
| 0.00                          | 0.00  | 0.00    | 1.10   | 9.90              | 89.70                     | 80.90       | 40.90                     | 9.20     |
| <b>Frequency (Hz)</b> <-----> |       |         |        |                   |                           |             |                           |          |
| Maximum                       |       | Minimum |        | Average Frequency | Frequency Variation Index | Std. Dev.   | Frequency in 15 Min Block |          |
| Freq                          | Time  | Freq    | Time   |                   |                           |             | MAX (Hz)                  | MIN (Hz) |
| 50.46                         | 4.07  | 49.41   | 6.54   | 49.94             | 0.38                      | 0.19        | 50.43                     | 49.60    |

**VII. Voltage profile**

| 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                | 410         | 3:03  | 0            | 18:40 | 0.7                    | 0.7     | 0.0     | 0.0     |
| Gorakhpur   | 400                | 427         | 3:07  | 411          | 8:51  | 0.0                    | 0.0     | 68.8    | 0.0     |
| Bareilly    | 400                | 422         | 20:50 | 407          | 9:50  | 0.0                    | 0.0     | 8.9     | 0.0     |
| Kanpur      | 400                | 419         | 3:17  | 397          | 6:43  | 0.0                    | 0.0     | 0.0     | 0.0     |
| Dadri       | 400                | 424         | 4:04  | 403          | 7:39  | 0.0                    | 0.0     | 9.2     | 0.0     |
| Ballabhgarh | 400                | 429         | 4:06  | 406          | 7:33  | 0.0                    | 0.0     | 33.0    | 0.0     |
| Bawana      | 400                | 428         | 3:16  | 407          | 7:40  | 0.0                    | 0.0     | 33.3    | 0.0     |
| Bassi       | 400                | 434         | 3:31  | 400          | 6:26  | 0.0                    | 0.0     | 29.1    | 4.5     |
| Hissar      | 400                | 419         | 4:04  | 396          | 7:36  | 0.0                    | 0.0     | 0.0     | 0.0     |
| Moga        | 400                | 416         | 21:59 | 396          | 15:35 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Abdullapur  | 400                | 426         | 2:24  | 408          | 10:15 | 0.0                    | 0.0     | 21.7    | 0.0     |
| Nalagarh    | 400                | 422         | 21:04 | 405          | 10:16 | 0.0                    | 0.0     | 0.5     | 0.0     |
| Kishenpur   | 400                | 413         | 4:03  | 387          | 7:21  | 0.0                    | 4.9     | 0.0     | 0.0     |
| Wagoora     | 400                | 398         | 13:05 | 361          | 19:34 | 52.8                   | 79.0    | 0.0     | 0.0     |

**VIII. 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 (m³/s) | Usage (m³/s) |
| Bhakra            | 513.59     | 445.62   | 497.24             | 983.40      | 504.38    | 1285.56     | 200.99        | 337.93       |
| Pong              | 426.72     | 384.05   | 412.59             | 588.94      | 415.06    | 680.86      | 76.48         | 403.20       |
| Tehri             | 829.79     | 740.04   | 816.70             | 935.00      | 818.65    | 982.26      | 49.24         | 170.00       |
| Koteswar          | 612.50     | 598.50   | 610.20             | 4.69        | NA        | NA          | 170.00        | 183.00       |
| Chamera-I         | 760.00     | 748.75   | NA                 | NA          | NA        | NA          | 50.72         | 49.04        |
| Rihand            | 268.22     | 252.98   | 262.22             | 500.10      | 263.90    | 617.70      | NA            | NA           |
| RPS               | 352.80     | 343.81   | 348.68             | NA          | NA        | NA          | NA            | NA           |
| Jawahar Sagar     | 298.70     | 295.78   | 298.34             | NA          | NA        | NA          | NA            | NA           |
| RSD               | 527.91     | 487.91   | 518.44             | NA          | 514.04    | NA          | 87.87         | 179.08       |

\* NA: Not Available

**IX. System Constraints:**

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

**XI. Weather Conditions For 19.12.2012 :**

1. Normal weather.

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

0.00

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

1: 400kV Chhabra - Kawai (RRVFN) line first time charged at 11.40hrs of dt 19.12.2012

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

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

Report for : 19.12.2012

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER