

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 22.02.2014

Date of Reporting : 23.02.2014

### 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 |
| 35998                       | 1682     | 37679       | 50.03      | 25452                   | 160      | 25612       | 50.25      | 745.6               | 42.78    |

\* 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:

UI [OD:(+ve), UD: (-ve)]

| 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       | 42.70                                    | 9.52         |                     | 52.23         | 37.69                       | 37.70                     | 0.01           | 89.93                   | 4.34                |
| Haryana      | 39.90                                    | 0.39         |                     | 40.29         | 62.01                       | 62.90                     | 0.89           | 103.19                  | 0.04                |
| Rajasthan    | 96.42                                    | 4.25         | 9.87                | 110.53        | 77.78                       | 73.93                     | -3.86          | 184.45                  | 0.27                |
| Delhi        | 18.38                                    |              |                     | 18.38         | 42.51                       | 41.48                     | -1.03          | 59.86                   | 0.27                |
| UP           | 107.25                                   | 3.10         | 16.80               | 127.15        | 82.48                       | 82.24                     | -0.23          | 209.40                  | 34.53               |
| Uttarakhand  |  | 8.14         |                     | 8.14          | 21.89                       | 24.05                     | 2.16           | 32.19                   | 1.48                |
| HP           |  | 5.42         |                     | 5.42          | 18.41                       | 18.41                     | 0.00           | 23.83                   | 0.15                |
| J & K        |  | 5.89         | 0.00                | 5.89          | 32.90                       | 33.48                     | 0.57           | 39.37                   | 1.70                |
| Chandigarh   |  |              |                     | 0.00          | 3.36                        | 3.37                      | 0.01           | 3.37                    | 0.00                |
| <b>Total</b> | <b>304.64</b>                            | <b>36.71</b> | <b>26.67</b>        | <b>368.02</b> | <b>379.03</b>               | <b>377.55</b>             | <b>-1.47</b>   | <b>745.57</b>           | <b>42.78</b>        |

\* Shortage furnished by the respective constituent.\$ Others include UP Co-generation and JK Diesel

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

UI/OA/PX [OD/Import: (+ve), UD/Export: (-ve)]

| 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 |               |
| Punjab       | 5012                        | 363         | 118        | -462                | 2682                    | 0          | -105        | 16                  | -7.23         |
| Haryana      | 5598                        | 0           | -35        | -139                | 3230                    | 0          | -6          | -341                | -5.29         |
| Rajasthan    | 7863                        | 54          | 39         | 852                 | 6460                    | 0          | -183        | 1058                | 37.92         |
| Delhi        | 3073                        | 0           | -75        | -828                | 1415                    | 10         | -113        | -1428               | -23.84        |
| UP           | 9562                        | 1125        | -176       | 418                 | 8188                    | 0          | -79         | 443                 | 6.79          |
| Uttarakhand  | 1706                        | 30          | 160        | 500                 | 973                     | 150        | 60          | 424                 | 11.77         |
| HP           | 1121                        | 10          | -109       | 188                 | 638                     | 0          | -69         | 322                 | 7.31          |
| J&K          | 1878                        | 100         | 10         | 519                 | 1783                    | 0          | 183         | 612                 | 11.26         |
| Chandigarh   | 185                         | 0           | 45         | 0                   | 83                      | 0          | -57         | 0                   | 0.00          |
| <b>Total</b> | <b>35998</b>                | <b>1682</b> | <b>-23</b> | <b>1048</b>         | <b>25452</b>            | <b>160</b> | <b>-369</b> | <b>1106</b>         | <b>38.70</b>  |

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

### III. Regional Entities :

UI [OG:(+ve), UG: (-ve)]

| 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                          | 2000                             | 1730                     | 1857               | 1368                   | 39.42              | 1643                   | 38.72              | 0.70         |
| Rihand I STPS                           | 1000                             | 945                      | 1005               | 849                    | 20.74              | 864                    | 20.79              | -0.05        |
| Rihand II STPS                          | 1000                             | 975                      | 1033               | 748                    | 21.18              | 882                    | 21.31              | -0.13        |
| Rihand III STPS                         | 1000                             | 485                      | 516                | 408                    | 10.88              | 453                    | 10.97              | -0.10        |
| Dadri I STPS                            | 840                              | 683                      | 823                | 602                    | 15.06              | 628                    | 15.51              | -0.45        |
| Dadri II STPS                           | 980                              | 877                      | 919                | 682                    | 18.16              | 757                    | 18.47              | -0.31        |
| Unchahar I TPS                          | 420                              | 408                      | 403                | 307                    | 7.95               | 331                    | 8.09               | -0.14        |
| Unchahar II TPS                         | 420                              | 406                      | 373                | 301                    | 7.54               | 314                    | 7.75               | -0.21        |
| Unchahar III TPS                        | 210                              | 203                      | 182                | 148                    | 3.64               | 152                    | 3.74               | -0.09        |
| ISTPP (Jhajjhar)                        | 1500                             | 1500                     | 642                | 642                    | 14.24              | 594                    | 14.40              | -0.16        |
| Dadri GPS                               | 830                              | 853                      | 409                | 296                    | 8.38               | 349                    | 8.49               | -0.11        |
| Anta GPS                                | 419                              | 423                      | 273                | 196                    | 5.55               | 231                    | 5.61               | -0.07        |
| Auraiya GPS                             | 663                              | 674                      | 162                | 118                    | 3.59               | 150                    | 3.38               | 0.21         |
| <b>Sub Total (A)</b>                    | <b>11282</b>                     | <b>10162</b>             | <b>8597</b>        | <b>6665</b>            | <b>176.34</b>      | <b>7347</b>            | <b>177.23</b>      | <b>-0.90</b> |
| <b>B. NPC</b>                           |                                  |                          |                    |                        |                    |                        |                    |              |
| NAPS                                    | 440                              | 299                      | 328                | 338                    | 7.09               | 296                    | 7.18               | -0.08        |
| RAPS- B                                 | 440                              | 417                      | 457                | 459                    | 9.97               | 415                    | 10.01              | -0.04        |
| RAPS- C                                 | 440                              | 430                      | 474                | 478                    | 10.24              | 427                    | 10.32              | -0.08        |
| <b>Sub Total (B)</b>                    | <b>1320</b>                      | <b>1146</b>              | <b>1259</b>        | <b>1275</b>            | <b>27.30</b>       | <b>1138</b>            | <b>27.50</b>       | <b>-0.20</b> |
| <b>C. NHPC</b>                          |                                  |                          |                    |                        |                    |                        |                    |              |
| Chamera I HPS                           | 540                              | 540                      | 540                | 0                      | 2.86               | 119                    | 2.87               | -0.01        |
| Chamera II HPS                          | 300                              | 200                      | 194                | 0                      | 1.31               | 55                     | 1.30               | 0.01         |
| Chamera III HPS                         | 231                              | 154                      | 160                | 0                      | 0.58               | 24                     | 0.60               | -0.02        |
| Bairasuil HPS                           | 180                              | 182                      | 182                | 60                     | 1.39               | 58                     | 1.39               | 0.00         |
| Salal-HPS                               | 690                              | 168                      | 288                | 90                     | 3.96               | 165                    | 3.90               | 0.06         |
| Tanakpur-HPS                            | 94                               | 0                        | 0                  | 0                      | 0.00               | 0                      | 0.00               | 0.00         |
| Uri-HPS                                 | 480                              | 181                      | 309                | 85                     | 4.34               | 181                    | 4.50               | -0.16        |
| Uri-II HPS                              | 180                              | 106                      | 121                | 79                     | 2.53               | 105                    | 2.59               | -0.05        |
| Dhauliganga-HPS                         | 280                              | 0                        | 0                  | 0                      | 0.00               | 0                      | 0.00               | 0.00         |
| Dulhasti-HPS                            | 390                              | 387                      | 404                | 0                      | 2.37               | 99                     | 2.40               | -0.03        |
| Sewa-II HPS                             | 120                              | 119                      | 125                | 0                      | 1.82               | 76                     | 1.80               | 0.02         |
| Parbati 3                               | 520                              | 0                        | 0                  | 0                      | 0.00               | 0                      | 0.00               | 0.00         |
| <b>Sub Total (C)</b>                    | <b>4005</b>                      | <b>2037</b>              | <b>2322</b>        | <b>314</b>             | <b>21</b>          | <b>882</b>             | <b>21</b>          | <b>0</b>     |
| <b>D. NJPC</b>                          |                                  |                          |                    |                        |                    |                        |                    |              |
| Nathpa Jhakri                           | 1500                             | 1605                     | 1009               | 0                      | 6.97               | 290                    | 6.74               | 0.22         |
| <b>Sub Total (D)</b>                    | <b>1500</b>                      | <b>1605</b>              | <b>1009</b>        | <b>0</b>               | <b>6.97</b>        | <b>290</b>             | <b>6.74</b>        | <b>0.22</b>  |
| <b>E. THDC</b>                          |                                  |                          |                    |                        |                    |                        |                    |              |
| Tehri HPS                               | 1000                             | 890                      | 894                | 0                      | 6.98               | 291                    | 7.00               | -0.02        |
| Koteshwar HPS                           | 400                              | 116                      | 301                | 0                      | 2.77               | 116                    | 2.80               | -0.03        |
| <b>Sub Total (E)</b>                    | <b>1400</b>                      | <b>1006</b>              | <b>1195</b>        | <b>0</b>               | <b>9.75</b>        | <b>406</b>             | <b>9.80</b>        | <b>-0.05</b> |
| <b>F. BBMB</b>                          |                                  |                          |                    |                        |                    |                        |                    |              |
| Bhakra HPS                              | 1497                             | 757                      | 1155               | 509                    | 18.35              | 765                    | 18.16              | 0.19         |
| Dehar HPS                               | 990                              | 144                      | 330                | 0                      | 3.72               | 155                    | 3.45               | 0.28         |
| Pong HPS                                | 396                              | 216                      | 306                | 120                    | 5.39               | 225                    | 5.19               | 0.20         |
| <b>Sub Total (F)</b>                    | <b>2883</b>                      | <b>1117</b>              | <b>1791</b>        | <b>629</b>             | <b>27.46</b>       | <b>1144</b>            | <b>26.80</b>       | <b>0.66</b>  |
| <b>G. IPP(s)/JV(s)</b>                  |                                  |                          |                    |                        |                    |                        |                    |              |
| ADHPL HPS(IPP)                          | 192                              | 0                        | 0                  | 0                      | 0.36               | 15                     | 0.35               | 0.01         |
| KWHEP HPS(IPP)                          | 1000                             | 0                        | 0                  | 0                      | 3.54               | 148                    | 3.48               | 0.06         |
| Malana Stg-II HPS                       | 100                              | 0                        | 0                  | 0                      | 0.12               | 5                      | 0.09               | 0.02         |
| Shree Cement TPS                        | 300                              | 0                        | 55                 | 0                      | 0.28               | 11                     | 2.76               | -2.49        |
| Budhil HPS(IPP)                         | 70                               | 0                        | 0                  | 0                      | 0.02               | 1                      | 0.17               | -0.15        |
| <b>Sub Total (G)</b>                    | <b>1662</b>                      | <b>0</b>                 | <b>55</b>          | <b>0</b>               | <b>4.32</b>        | <b>180</b>             | <b>6.86</b>        | <b>-2.54</b> |
| <b>H. Total Regional Entities (A-G)</b> | <b>24052</b>                     | <b>17073</b>             | <b>16228</b>       | <b>8883</b>            | <b>273.30</b>      | <b>11387</b>           | <b>276.28</b>      | <b>-2.99</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          | 810          | 19.95         | 831                  |
|   | Guru Nanak Dev TPS(Bhatinda)     | 440                               | 170          | 170          | 3.93          | 164                  |
|   | Guru Har Gobind Singh TPS(L.mbt) | 920                               | 954          | 696          | 18.80         | 784                  |
|   | Goindwal(GVK)                    |                                   | 0            | 0            | 0.00          | 0                    |
|   | Rajpura                          | 700                               | 0            | 0            | 0.02          | 1                    |
|   | Talwandi Saboo                   | 660                               | 0            | 0            | 0.00          | 0                    |
|   | Thermal (Total)                  | 3980                              | 2074         | 1676         | 42.70         | 1779                 |
|   | Total Hydro                      | 1148                              | 513          | 326          | 9.52          | 397                  |
| <b>Total Punjab</b>   | <b>5128</b>                      | <b>2587</b>                       | <b>2002</b>  | <b>52.23</b> | <b>2176</b>   |                      |
| Haryana   | Panipat TPS                      | 1367                              | 226          | 226          | 5.24          | 218                  |
|   | DCRTPP (Yamuna nagar)            | 600                               | 535          | 501          | 12.15         | 506                  |
|   | Faridabad GPS (NTPC)             | 432                               | 345          | 302          | 8.34          | 348                  |
|   | RGTPP (khedar) (IPP)             | 1200                              | 576          | 0            | 4.12          | 172                  |
|   | Magnum Diesel (IPP)              | 25                                | 0            | 0            | 0.00          | 0                    |
|   | Jhajjar(CLP)                     | 1320                              | 521          | 377          | 10.05         | 419                  |
|   | Thermal (Total)                  | 4944                              | 2203         | 1406         | 39.90         | 1662                 |
|   | Total Hydro                      | 62                                | 14           | 17           | 0.39          | 16                   |
|   | <b>Total Haryana</b>             | <b>5006</b>                       | <b>2217</b>  | <b>1423</b>  | <b>40.29</b>  | <b>1679</b>          |
|   | Rajasthan                        | kota TPS                          | 1240         | 1060         | 1094          | 26.07                |
| suratgarh TPS   |                                  | 1500                              | 1366         | 1245         | 30.59         | 1275                 |
| Chabra TPS  |                                  | 750                               | 651          | 569          | 14.94         | 622                  |
| Dholpur GPS   |                                  | 330                               | 138          | 136          | 3.46          | 144                  |
| Ramgarh GPS   |                                  | 221                               | 59           | 122          | 2.83          | 118                  |
| RAPS A (NPC)  |                                  | 300                               | 175          | 175          | 4.18          | 174                  |
| Barsingar (NLC)   |                                  | 250                               | 101          | 95           | 2.47          | 103                  |
| Giral LTPS  |                                  | 250                               | 74           | 72           | 1.40          | 58                   |
| Rajwest LTPS (IPP)  |                                  | 1080                              | 0            | 0            | 0.00          | 0                    |
| VSLP LTPS (IPP)   |                                  | 135                               | 0            | 0            | 0.00          | 0                    |
| Kalisindh Thermal   |                                  | 600                               | 0            | 0            | 0.00          | 0                    |
| Kawai(Adani)  |                                  | 1320                              | 429          | 433          | 10.48         | 437                  |
| Thermal (Total)   |                                  | 7976                              | 4053         | 3941         | 96.42         | 4017                 |
| Total Hydro   |                                  | 550                               | 209          | 87           | 4.25          | 177                  |
| Wind power  |                                  | 2191                              | 311          | 513          | 8.78          | 366                  |
| Biomass   |                                  | 91                                | 26           | 26           | 0.63          | 26                   |
| Solar   |                                  | 201                               | 4            | 0            | 0.46          | 19                   |
| Renewable/Others (Total)  |                                  | 2483                              | 337          | 539          | 9.87          | 411                  |
| <b>Total Rajasthan</b>  |                                  | <b>11009</b>                      | <b>4599</b>  | <b>4567</b>  | <b>110.53</b> | <b>4605</b>          |
| UP  |                                  | Anpara TPS                        | 1630         | 1118         | 1110          | 24.00                |
|   | Obra TPS                         | 1288                              | 351          | 358          | 7.70          | 321                  |
|   | Paricha TPS                      | 1140                              | 686          | 583          | 14.00         | 583                  |
|   | Panki TPS                        | 210                               | 85           | 80           | 1.80          | 75                   |
|   | Harduaganj TPS                   | 665                               | 467          | 434          | 9.70          | 404                  |
|   | Tanda TPS (NTPC)                 | 440                               | 392          | 328          | 8.91          | 371                  |
|   | Roza TPS (IPP)                   | 1200                              | 792          | 738          | 18.09         | 754                  |
|   | Anpara-C (IPP)                   | 1200                              | 1051         | 550          | 18.29         | 762                  |
|   | Bajaj Energy Pvt.Ltd(IPP) TPS    | 450                               | 240          | 195          | 4.76          | 198                  |
|   | Thermal (Total)                  | 8223                              | 5182         | 4376         | 107.25        | 4469                 |
|   | Vishnuparyag HPS (IPP)           | 400                               | 0            | 0            | 0.00          | 0                    |
|   | Other Hydro                      | 527                               | 91           | 151          | 3.10          | 129                  |
|   | Cogeneration                     | 981                               | 700          | 700          | 16.80         | 700                  |
|   | <b>Total UP</b>                  | <b>10131</b>                      | <b>5973</b>  | <b>5227</b>  | <b>127.15</b> | <b>5298</b>          |
| Uttarakhand   | Total Hydro                      | 1303                              | 480          | 147          | 8.14          | 339                  |
|   | <b>Total Uttarakhand</b>         | <b>1303</b>                       | <b>480</b>   | <b>147</b>   | <b>8.14</b>   | <b>339</b>           |
| Delhi   | Rajghat TPS                      | 135                               | 0            | 0            | 0.00          | 0                    |
|   | Delhi Gas Turbine                | 282                               | 82           | 82           | 1.96          | 81                   |
|   | Pragati Gas Turbine              | 330                               | 301          | 272          | 7.01          | 292                  |
|   | Rithala GPS                      | 95                                | 0            | 0            | 0.00          | 0                    |
|   | Bawana GPS                       | 686                               | 0            | 0            | 0.00          | 0                    |
|   | Badarpur TPS (NTPC)              | 705                               | 430          | 430          | 9.42          | 392                  |
|   | Thermal (Total)                  | 2232                              | 813          | 784          | 18.38         | 766                  |
|   | <b>Total Delhi</b>               | <b>2232</b>                       | <b>813</b>   | <b>784</b>   | <b>18.38</b>  | <b>766</b>           |
| HP  | Baspa HPS (IPP)                  | 330                               | 30           | 0            | 0.94          | 39                   |
|   | Malana HPS (IPP)                 | 86                                | 0            | 0            | 0.20          | 8                    |
|   | Other Hydro                      | 589                               | 208          | 113          | 4.29          | 179                  |
|   | <b>Total HP</b>                  | <b>1005</b>                       | <b>238</b>   | <b>113</b>   | <b>5.42</b>   | <b>226</b>           |
| J & K   | Baglihar HPS (IPP)               | 450                               | 148          | 148          | 3.53          | 147                  |
|   | Other Hydro                      | 323                               | 94           | 132          | 2.36          | 98                   |
|   | Gas/Diesel/Others                | 183                               | 0            | 0            | 0.00          | 0                    |
|   | <b>Total J &amp; K</b>           | <b>956</b>                        | <b>242</b>   | <b>280</b>   | <b>5.89</b>   | <b>246</b>           |
| <b>Total State Control Area Generation</b>                        |                                  | <b>36770</b>                      | <b>17149</b> | <b>14543</b> | <b>368.02</b> | <b>15334</b>         |
| <b>J. Net Inter Regional Exchange</b> (Import (+ve)/Export (-ve)) |                                  |                                   | <b>4709</b>  | <b>3159</b>  | <b>119.12</b> | <b>4963</b>          |
| <b>Total Regional Availability(Gross)</b>                         |                                  | <b>60823</b>                      | <b>38086</b> | <b>26585</b> | <b>760.44</b> | <b>31685</b>         |

#### IV. Total Hydro Generation:

|                             |              |             |             |               |             |
|-----------------------------|--------------|-------------|-------------|---------------|-------------|
| Regional Entities Hydro     | 11080        | 6317        | 943         | 69.37         | 2890        |
| State Control Area Hydro    | 5368         | 1787        | 1121        | 36.71         | 1530        |
| <b>Total Regional Hydro</b> | <b>16448</b> | <b>8104</b> | <b>2064</b> | <b>106.08</b> | <b>4420</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             | 500             | -100                | 500                      | 100    | 8.96          | 0.44        | 8.52          |
| Gwalior-Agra (D/C)         | 1269            | 1166                | 1692                     | 0      | 34.18         | 0.00        | 34.18         |
| Zerda-Kankroli             | -30             | -329                | 142                      | 350    | 0.00          | 2.14        | -2.14         |
| Zerda-Bhinmal              | 75              | -231                | 312                      | 247    | 0.95          | 0.00        | 0.95          |
| Malanpur-Auraiya           | -88             | -31                 | 0                        | 88     | 0.00          | 1.08        | -1.08         |
| Badod-Kota/Morak           | -27             | -161                | 22                       | 173    | 0.00          | 1.74        | -1.74         |
| Mundra-Mohinderghar(HVDC)  | 2003            | 2002                | 2004                     | 0      | 48.34         | 0.00        | 48.34         |
| <b>Sub Total WR</b>        | <b>3702</b>     | <b>2316</b>         |                          |        | <b>92.42</b>  | <b>5.39</b> | <b>87.03</b>  |
| Pusauli Bypass             | 300             | 300                 | 300                      | 0      | 6.64          | 0.00        | 6.64          |
| MZP- GKP (D/C)             | 105             | 88                  | 307                      | 0      | 3.77          | 0.00        | 3.77          |
| Patna-Balia(D/C)           | 366             | 400                 | 786                      | 0      | 11.78         | 0.00        | 11.78         |
| B'Sharif-Balia (D/C)       | 235             | 179                 | 677                      | 0      | 7.71          | 0.00        | 7.71          |
| Pusauli-Balia              | -74             | -70                 | 0                        | 92     | 0.00          | 1.00        | -1.00         |
| Gaya-Fatehpur (765 Kv)     | -31             | -92                 | 130                      | 116    | 0.00          | 0.01        | -0.01         |
| Pusauli-Sahupuri           | 132             | 133                 | 160                      | 0      | 2.87          | 0.00        | 2.87          |
| K'nasa-Sahupuri            | 0               | 0                   | 0                        | 0      | 0.00          | 0.00        | 0.00          |
| Son Ngr-Rihand             | -31             | -28                 | 0                        | 0      | 0.00          | 0.68        | -0.68         |
| Garhwa-Rihand              | 0               | 0                   | 0                        | 0      | 0.00          | 0.00        | 0.00          |
| Sasaram - Fatehpur(765 KV) | 5               | -67                 | 227                      | 84     | 1.02          | 0.00        | 1.02          |
| <b>Sub Total ER</b>        | <b>1007</b>     | <b>843</b>          |                          |        | <b>33.78</b>  | <b>1.69</b> | <b>32.10</b>  |
| <b>Total IR Exch</b>       | <b>4709</b>     | <b>3159</b>         |                          |        | <b>126.21</b> | <b>7.08</b> | <b>119.12</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 |
| 25.16                 | 0.15   | 25.31 | 14.49                   | 2.03       | 8.42                     | 10.81      | 0.07          | -0.07      |

  

| 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 |
| 48.29                  | 71.79                   | 120.07 | 32.10                | 87.03      | 119.12 | -16.19         | 15.24      | -0.95 |

**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 | >50.50 |
|-------|-------|-------|-------|-------|------------|-------------|--------|--------|--------|
| 0.00  | 0.00  | 1.10  | 6.70  | 29.80 | 41.80      | 21.20       | 30.30  | 9.90   | 0.00   |

| <----- 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                |                           |           |                           |          |
| 50.42                        | 18.03 | 49.74   | 6.44 | 50.05             | 0.14                      | 0.10      | 50.33                     | 49.86    |

**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                | 415         | 03:08 | 399          | 18:46 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Gorakhpur  | 400                | 427         | 03:06 | 400          | 18:49 | 0.0                    | 0.0     | 44.6    | 0.0     |
| Bareilly   | 400                | 430         | 02:59 | 408          | 18:38 | 30.2                   | 30.2    | 32.9    | 0.0     |
| Kanpur     | 400                | 425         | 02:58 | 403          | 18:44 | 0.0                    | 0.0     | 21.5    | 0.0     |
| Dadri      | 400                | 429         | 03:25 | 407          | 18:43 | 0.0                    | 0.0     | 25.7    | 0.0     |
| Ballabgarh | 400                | 436         | 03:00 | 415          | 08:41 | 0.0                    | 0.0     | 78.0    | 22.1    |
| Bawana     | 400                | 432         | 02:59 | 411          | 18:44 | 0.0                    | 0.0     | 62.6    | 6.8     |
| Bassi      | 400                | 432         | 03:38 | 399          | 08:38 | 0.0                    | 0.0     | 33.4    | 0.7     |
| Hissar     | 400                | 420         | 00:50 | 400          | 18:43 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Moga       | 400                | 423         | 01:03 | 401          | 18:35 | 0.0                    | 0.0     | 11.1    | 0.0     |
| Abdullapur | 400                | 425         | 02:06 | 400          | 06:29 | 0.0                    | 0.0     | 0.1     | 0.0     |
| Nalagarh   | 400                | 428         | 23:03 | 409          | 06:43 | 0.0                    | 0.0     | 32.9    | 0.0     |
| Kishenpur  | 400                | 420         | 02:01 | 391          | 18:44 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Wagoora    | 400                | 406         | 13:03 | 371          | 18:48 | 13.6                   | 46.0    | 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                | 780         | 02:58 | 744          | 15:07 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Balia    | 765                | 776         | 00:00 | 776          | 00:00 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Moga     | 765                | 802         | 01:07 | 762          | 18:44 | 0.0                    | 0.0     | 1.0     | 0.0     |
| Agra     | 765                | 813         | 02:59 | 776          | 08:40 | 0.0                    | 0.0     | 30.9    | 0.0     |
| Bhiwani  | 765                | 745         | 00:56 | 712          | 11:12 | 44.2                   | 96.1    | 0.0     | 0.0     |
| Unnao    | 765                | 778         | 01:05 | 728          | 18:49 | 0.0                    | 11.8    | 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   | 491.31             | 778.28      | 485.63    | 602.63      | 196.69                     | 587.91                    |
| Pong              | 426.72     | 384.05   | 406.29             | 379.44      | 113.15    | 360.50      | 404.06                     | 320.26                    |
| Tehri             | 829.79     | 740.04   | 793.20             | 500.00      | 818.65    | 982.26      | 70.61                      | 177.00                    |
| Koteshwar         | 612.50     | 598.50   | 610.51             | 4.82        | 610.00    | 4.69        | 177.00                     | 184.00                    |
| Chamera-I         | 760.00     | 748.75   | NA                 | NA          | NA        | NA          | 80.14                      | 77.50                     |
| Rihand            | 268.22     | 252.98   | 259.60             | 283.00      | 259.48    | 276.40      | NA                         | NA                        |
| RPS               | 352.80     | 343.81   | NA                 | NA          | NA        | NA          | NA                         | NA                        |
| Jawahar Sagar     | 298.70     | 295.78   | NA                 | NA          | NA        | NA          | NA                         | NA                        |
| RSD               | 527.91     | 487.91   | 508.53             | 14.40       | 509.22    | 14.40       | 101.69                     | 79.60                     |

\* NA: Not Available

**X. System Constraints:**

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

NIL

**XII. Weather Conditions For 22.02.2014 :**

Normal weather in NR.

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

0.00

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

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

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

Vishnuprayag (400MW) and Dhauliganga (280MW) are out of operation since 16.06.2013.

Civil construction is in progress for rectification of the major damages in Plants/Dam caused due to flood Vishnuprayag and Dhauliganga expected by Mar, 2014 .

Report for : 22.02.2014

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER