

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 27.04.2012  
Date of Reporting : 28.04.2012

### I. Regional Availability/Demand:

| Demand Met | Evening Peak (20:00 Hrs) MW |             |            | Demand Met | Off Peak (03:00 Hrs) MW |             |            | Day Energy (Net MU) |          |
|------------|-----------------------------|-------------|------------|------------|-------------------------|-------------|------------|---------------------|----------|
|            | Shortage                    | Requirement | Freq* (Hz) |            | Shortage                | Requirement | Freq* (Hz) | Demand Met          | Shortage |
| 31131      | 2815                        | 33947       | 49.84      | 27949      | 1050                    | 28999       | 50.05      | 694.7               | 43.24    |

\* Half hourly (two 15 minutes block-one block each before and after the designated time) average frequency

### II. A. State's Load Details (At States periphery) in MUs:

| State        | State's Control Area Generation (Net MU) |              |                     |               | Drawal Schedule (Net MU) | Actual Drawal (Net MU) | UI (Net MU)  | Consumption (Net MU) | Shortages* (MU) |
|--------------|--|--------------|---------------------|---------------|--------------------------|------------------------|--------------|----------------------|-----------------|
|              | Thermal                                  | Hydro        | Renewable/others \$ | Total         |                          |                        |              |                      |                 |
| Punjab       | 47.93                                    | 7.67         |                     | 55.60         | 42.67                    | 40.40                  | -2.27        | 95.99                | 1.80            |
| Haryana      | 58.72                                    | 0.68         |                     | 59.40         | 35.13                    | 31.84                  | -3.29        | 91.24                | 2.03            |
| Rajasthan    | 75.70                                    | 0.00         | 6.93                | 82.63         | 32.17                    | 51.27                  | 19.11        | 133.90               | 0.81            |
| Delhi        | 27.64                                    |              |                     | 27.64         | 54.15                    | 44.44                  | -9.72        | 72.08                | 0.04            |
| UP           | 101.54                                   | 5.78         | 7.20                | 114.52        | 85.76                    | 102.89                 | 17.14        | 217.41               | 33.48           |
| Uttarakhand  |  | 10.98        |                     | 10.98         | 12.87                    | 17.52                  | 4.64         | 28.49                | 2.14            |
| HP           |  | 11.52        |                     | 11.52         | 11.07                    | 9.42                   | -1.65        | 20.94                | 1.04            |
| J & K        |  | 13.82        | 0.00                | 13.82         | 14.43                    | 16.61                  | 2.18         | 30.43                | 1.90            |
| Chandigarh   |  |              |                     | 0.00          | 4.59                     | 4.25                   | -0.34        | 4.25                 | 0.00            |
| <b>Total</b> | <b>311.54</b>                            | <b>50.44</b> | <b>14.13</b>        | <b>376.11</b> | <b>292.84</b>            | <b>318.63</b>          | <b>25.79</b> | <b>694.73</b>        | <b>43.24</b>    |

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

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

| State        | Evening Peak (20:00 Hrs) MW |             |            |                     | Off Peak (03:00 Hrs) MW |             |            |                     | Day Energy MU |
|--------------|-----------------------------|-------------|------------|---------------------|-------------------------|-------------|------------|---------------------|---------------|
|              | Demand Met                  | Shortage    | UI         | STOA/PX transaction | Demand Met              | Shortage    | UI         | STOA/PX transaction |               |
| Punjab       | 4430                        | 450         | -58        | 7                   | 3824                    | 0           | -338       | 7                   | 0.16          |
| Haryana      | 4581                        | 436         | 299        | 54                  | 3571                    | 0           | -594       | 54                  | 1.31          |
| Rajasthan    | 5912                        | 0           | 1048       | -366                | 5223                    | 0           | 271        | -366                | -8.78         |
| Delhi        | 3361                        | 0           | -523       | 411                 | 2317                    | 0           | -459       | 211                 | 8.04          |
| UP           | 9038                        | 1653        | 223        | 465                 | 9957                    | 1050        | 1669       | 265                 | 7.36          |
| Uttarakhand  | 1252                        | 150         | 38         | 47                  | 1062                    | 0           | 303        | 47                  | 1.14          |
| HP           | 931                         | 26          | -132       | -730                | 785                     | 0           | -59        | -92                 | -8.36         |
| J&K          | 1418                        | 100         | 59         | -411                | 1089                    | 0           | 9          | -411                | -9.87         |
| Chandigarh   | 207                         | 0           | -44        | 27                  | 121                     | 0           | -25        | 0                   | 0.61          |
| <b>Total</b> | <b>31131</b>                | <b>2815</b> | <b>909</b> | <b>-496</b>         | <b>27949</b>            | <b>1050</b> | <b>776</b> | <b>-285</b>         | <b>-8.39</b>  |

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

### III. Regional Entities :

| Entity                                  | 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 |
|---|-------------------------|----------------------------------|--------------------------|--------------------|------------------------|--------------------|------------------------|--------------------|--------------|
|   |                         |                                  |                          |                    |                        |                    |                        |                    |              |
| A. NTPC                                 | Singrauli STPS          | 2000                             | 1447                     | 1568               | 1579                   | 34.42              | 1434                   | 34.72              | -0.30        |
|   | Rihand I STPS           | 1000                             | 419                      | 472                | 470                    | 10.14              | 423                    | 10.03              | 0.12         |
|   | Rihand II STPS          | 1000                             | 975                      | 1036               | 1041                   | 23.49              | 979                    | 23.33              | 0.16         |
|   | Dadri I STPS            | 840                              | 803                      | 852                | 875                    | 17.92              | 746                    | 16.54              | 1.37         |
|   | Dadri II STPS           | 980                              | 470                      | 477                | 508                    | 11.13              | 464                    | 10.71              | 0.41         |
|   | Unchahar I TPS          | 420                              | 390                      | 430                | 421                    | 9.24               | 385                    | 9.27               | -0.03        |
|   | Unchahar II TPS         | 420                              | 198                      | 218                | 218                    | 4.70               | 196                    | 4.66               | 0.04         |
|   | Unchahar III TPS        | 210                              | 199                      | 219                | 212                    | 4.71               | 196                    | 4.70               | 0.00         |
|   | ISTPP (Jhajjar)         | 1000                             | 960                      | 350                | 371                    | 17.27              | 720                    | 16.40              | 0.87         |
|   | Dadri GPS               | 830                              | 760                      | 387                | 560                    | 11.50              | 479                    | 12.67              | -1.17        |
|   | Anta GPS                | 419                              | 308                      | 286                | 183                    | 5.18               | 216                    | 5.20               | -0.03        |
|   | Auraiya GPS             | 663                              | 616                      | 307                | 287                    | 6.81               | 284                    | 6.77               | 0.03         |
|   | <b>Sub Total (A)</b>    | <b>9782</b>                      | <b>7545</b>              | <b>6602</b>        | <b>6725</b>            | <b>156.50</b>      | <b>6521</b>            | <b>155.01</b>      | <b>1.48</b>  |
|   | B. NPC                  | NAPS                             | 440                      | 268                | 308                    | 313                | 6.54                   | 273                | 6.43         |
| RAPS- B                                 |                         | 440                              | 381                      | 413                | 422                    | 8.99               | 374                    | 9.14               | -0.16        |
| RAPS- C                                 |                         | 440                              | 420                      | 465                | 472                    | 10.09              | 420                    | 10.08              | 0.01         |
| <b>Sub Total (B)</b>                    |                         | <b>1320</b>                      | <b>1069</b>              | <b>1186</b>        | <b>1207</b>            | <b>25.62</b>       | <b>1067</b>            | <b>25.66</b>       | <b>-0.04</b> |
| C. NHPC                                 | Chamera I HPS           | 540                              | 534                      | 540                | 356                    | 7.89               | 329                    | 8.00               | -0.12        |
|   | Chamera II HPS          | 300                              | 297                      | 225                | 200                    | 5.57               | 232                    | 5.30               | 0.27         |
|   | Bairasuil HPS           | 180                              | 182                      | 182                | 182                    | 3.94               | 164                    | 4.09               | -0.15        |
|   | Salal-HPS               | 690                              | 430                      | 439                | 410                    | 10.11              | 421                    | 10.28              | -0.17        |
|   | Tanakpur-HPS            | 94                               | 20                       | 37                 | 18                     | 0.60               | 25                     | 0.62               | -0.02        |
|   | Uri-HPS                 | 480                              | 475                      | 480                | 480                    | 11.57              | 482                    | 11.56              | 0.01         |
|   | Dhauliganga-HPS         | 280                              | 277                      | 316                | 0                      | 1.40               | 58                     | 1.54               | -0.14        |
|   | Dulhasti-HPS            | 390                              | 388                      | 379                | 400                    | 8.50               | 354                    | 8.55               | -0.06        |
|   | Sewa-II HPS             | 120                              | 80                       | 85                 | 71                     | 1.92               | 80                     | 1.92               | 0.00         |
|   | <b>Sub Total (C)</b>    | <b>3074</b>                      | <b>2683</b>              | <b>2683</b>        | <b>2117</b>            | <b>51.48</b>       | <b>2145</b>            | <b>51.86</b>       | <b>-0.37</b> |
| D. NJPC                                 | Nathpa Jhakri           | 1500                             | 1600                     | 1613               | 0                      | 12.90              | 538                    | 12.77              | 0.13         |
|   | <b>Sub Total (D)</b>    | <b>1500</b>                      | <b>1600</b>              | <b>1613</b>        | <b>0</b>               | <b>12.90</b>       | <b>538</b>             | <b>12.77</b>       | <b>0.13</b>  |
| E. THDC                                 | Tehri HPS               | 1000                             | 470                      | 473                | 0                      | 6.83               | 285                    | 6.85               | -0.02        |
|   | Koteshwar HPS           | 400                              | 300                      | 302                | 0                      | 3.06               | 127                    | 3.00               | 0.06         |
|   | <b>Sub Total (E)</b>    | <b>1400</b>                      | <b>770</b>               | <b>775</b>         | <b>0</b>               | <b>9.89</b>        | <b>412</b>             | <b>9.85</b>        | <b>0.04</b>  |
| F. BBMB                                 | Bhakra HPS              | 1480                             | 448                      | 769                | 384                    | 11.18              | 466                    | 10.75              | 0.43         |
|   | Dehar HPS               | 990                              | 413                      | 495                | 435                    | 10.38              | 433                    | 9.91               | 0.48         |
|   | Pong HPS                | 396                              | 3                        | 60                 | 0                      | 0.11               | 5                      | 0.07               | 0.04         |
|   | <b>Sub Total (F)</b>    | <b>2866</b>                      | <b>864</b>               | <b>1324</b>        | <b>819</b>             | <b>21.67</b>       | <b>903</b>             | <b>20.73</b>       | <b>0.94</b>  |
| G. IPP(s)/JV(s)                         | ADHPL HPS(IPP)          | 192                              | 0                        | 11                 | 0                      | 1.12               | 47                     | 1.23               | -0.11        |
|   | KWHEP HPS(IPP)          | 1000                             | 0                        | 600                | 225                    | 7.34               | 306                    | 7.20               | 0.14         |
|   | Malana Stg-II HPS       | 100                              | 0                        | 0                  | 0                      | 0.00               | 0                      | 0.00               | 0.00         |
|   | Shree Cement TPS        | 300                              | 0                        | 172                | 111                    | 4.06               | 169                    | 4.63               | -0.56        |
|   | <b>Sub Total (G)</b>    | <b>1592</b>                      | <b>0</b>                 | <b>783</b>         | <b>336</b>             | <b>12.53</b>       | <b>522</b>             | <b>13.06</b>       | <b>-0.53</b> |
| <b>H. Total Regional Entities (A-G)</b> | <b>21535</b>            | <b>14531</b>                     | <b>14966</b>             | <b>11204</b>       | <b>290.59</b>          | <b>12108</b>       | <b>288.93</b>          | <b>1.66</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                              | 1130         | 900          | 23.07         | 961                  |
|   | Guru Nanak Dev TPS(Bhatinda)    | 440                               | 218          | 190          | 4.55          | 190                  |
|   | Guru Hargobind Singh TPS(L.mbt) | 920                               | 808          | 865          | 20.31         | 846                  |
|   | Thermal (Total)                 | 2620                              | 2156         | 1955         | 47.93         | 1997                 |
|   | Total Hydro                     | 1148                              | 439          | 299          | 7.67          | 319                  |
|   | <b>Total Punjab</b>             | <b>3768</b>                       | <b>2595</b>  | <b>2254</b>  | <b>55.60</b>  | <b>2317</b>          |
| Haryana   | Panipat TPS                     | 1367                              | 1062         | 1072         | 25.27         | 1053                 |
|   | DCRTPP (Yamuna nagar)           | 600                               | 0            | 0            | 0.00          | 0                    |
|   | Faridabad GPS (NTPC)            | 432                               | 384          | 406          | 8.62          | 359                  |
|   | RGTPP (khedar) (IPP)            | 1200                              | 1030         | 979          | 24.83         | 1034                 |
|   | Magnum Diesel (IPP)             | 25                                | 0            | 0            | 0.00          | 0                    |
|   | Jhajjar(CLP)                    | 1320                              | 0            | 0            | 0.00          | 0                    |
|   | Thermal (Total)                 | 4944                              | 2476         | 2457         | 58.72         | 2447                 |
|   | Total Hydro                     | 62                                | 28           | 24           | 0.68          | 28                   |
|   | <b>Total Haryana</b>            | <b>5006</b>                       | <b>2504</b>  | <b>2481</b>  | <b>59.40</b>  | <b>2475</b>          |
| Rajasthan   | kota TPS                        | 1240                              | 1157         | 1161         | 27.77         | 1157                 |
|   | suratgarh TPS                   | 1500                              | 1311         | 1270         | 31.58         | 1316                 |
|   | Chabra TPS                      | 500                               | 199          | 183          | 4.57          | 190                  |
|   | Dholpur GPS                     | 330                               | 101          | 98           | 2.41          | 100                  |
|   | Ramgarh GPS                     | 111                               | 3            | 3            | 0.06          | 2                    |
|   | RAPS A (NPC)                    | 300                               | 0            | 0            | 0.00          | 0                    |
|   | Barsingsar (NLC)                | 250                               | 0            | 0            | 0.00          | 0                    |
|   | Giral LTPS                      | 250                               | 43           | 44           | 1.04          | 43                   |
|   | Rajwest LTPS (IPP)              | 540                               | 345          | 345          | 8.28          | 345                  |
|   | VSLP LTPS (IPP)                 | 135                               | 0            | 0            | 0.00          | 0                    |
|   | Thermal (Total)                 | 5156                              | 3159         | 3104         | 75.70         | 3154                 |
|   | Total Hydro                     | 550                               | 0            | 0            | 0.00          | 0                    |
|   | Wind power                      | 1843                              | 173          | 561          | 5.86          | 244                  |
|   | Biomass                         | 91                                | 45           | 45           | 1.07          | 45                   |
|   | Solar                           | 128                               | 0            | 0            | 0.00          | 0                    |
|   | Renewable/Others (Total)        | 2062                              | 218          | 606          | 6.93          | 289                  |
|   | <b>Total Rajasthan</b>          | <b>7767</b>                       | <b>3377</b>  | <b>3710</b>  | <b>82.63</b>  | <b>3443</b>          |
| UP  | Anpara TPS                      | 1630                              | 1283         | 1110         | 25.40         | 1058                 |
|   | Obra TPS                        | 1382                              | 550          | 503          | 11.50         | 479                  |
|   | Paricha TPS                     | 640                               | 431          | 431          | 9.20          | 383                  |
|   | Panki TPS                       | 210                               | 150          | 100          | 2.80          | 117                  |
|   | Harduaganj TPS                  | 415                               | 265          | 278          | 6.10          | 254                  |
|   | Tanda TPS (NTPC)                | 440                               | 193          | 190          | 4.79          | 200                  |
|   | Roza TPS (IPP)                  | 1200                              | 1121         | 1130         | 26.41         | 1101                 |
|   | Anpara-C (IPP)                  | 1200                              | 287          | 306          | 7.31          | 305                  |
|   | Bajaj Energy Pvt.Ltd(IPP) TPS   | 450                               | 281          | 357          | 8.03          | 334                  |
|   | Thermal (Total)                 | 7567                              | 4561         | 4405         | 101.54        | 4231                 |
|   | Vishnuparyag HPS (IPP)          | 400                               | 123          | 124          | 2.90          | 121                  |
|   | Other Hydro                     | 527                               | 138          | 29           | 2.88          | 120                  |
|   | Cogeneration                    | 981                               | 300          | 300          | 7.20          | 300                  |
|   | <b>Total UP</b>                 | <b>9475</b>                       | <b>5122</b>  | <b>4858</b>  | <b>114.52</b> | <b>4651</b>          |
| Uttarakhand   | Total Hydro                     | 1303                              | 536          | 347          | 10.98         | 457                  |
|   | <b>Total Uttarakhand</b>        | <b>1303</b>                       | <b>536</b>   | <b>347</b>   | <b>10.98</b>  | <b>457</b>           |
| Delhi   | Rajghat TPS                     | 135                               | 56           | 99           | 2.02          | 84                   |
|   | Delhi Gas Turbine               | 282                               | 190          | 192          | 4.80          | 200                  |
|   | Pragati Gas Turbine             | 330                               | 287          | 306          | 7.28          | 303                  |
|   | Rithala GPS                     | 108                               | 32           | 33           | 0.79          | 33                   |
|   | Bawana GPS                      | 677                               | 0            | 0            | 0.00          | 0                    |
|   | Badarpur TPS (NTPC)             | 705                               | 590          | 574          | 12.75         | 531                  |
|   | Thermal (Total)                 | 2237                              | 1155         | 1204         | 27.64         | 1152                 |
|   | <b>Total Delhi</b>              | <b>2237</b>                       | <b>1155</b>  | <b>1204</b>  | <b>27.64</b>  | <b>1152</b>          |
| HP  | Baspa HPS (IPP)                 | 330                               | 0            | 0            | 1.58          | 66                   |
|   | Malana HPS (IPP)                | 86                                | 67           | 0            | 0.62          | 26                   |
|   | Other Hydro                     | 589                               | 376          | 375          | 9.32          | 388                  |
|   | <b>Total HP</b>                 | <b>1005</b>                       | <b>443</b>   | <b>375</b>   | <b>12</b>     | <b>480</b>           |
| J & K   | Baglihar HPS (IPP)              | 450                               | 436          | 436          | 10.51         | 438                  |
|   | Other Hydro                     | 323                               | 140          | 132          | 3.31          | 138                  |
|   | Gas/Diesel/Others               | 183                               | 0            | 0            | 0.00          | 0                    |
|   | <b>Total J &amp; K</b>          | <b>956</b>                        | <b>576</b>   | <b>568</b>   | <b>13.82</b>  | <b>576</b>           |
| <b>Total State Control Area Generation</b>                        |                                 | <b>31517</b>                      | <b>16308</b> | <b>15797</b> | <b>376.11</b> | <b>15551</b>         |
| <b>J. Net Inter Regional Exchange (Import (+ve)/Export (-ve))</b> |                                 |                                   | <b>1586</b>  | <b>1472</b>  | <b>37.71</b>  | <b>1571</b>          |
| <b>Total Regional Availability(Gross)</b>                         |                                 | <b>53052</b>                      | <b>32860</b> | <b>28473</b> | <b>704.40</b> | <b>29229</b>         |

#### IV. Total Hydro Generation:

|                             |              |             |             |               |             |
|-----------------------------|--------------|-------------|-------------|---------------|-------------|
| Regional Entities Hydro     | 10133        | 7006        | 3161        | 104.41        | 4351        |
| State Control Area Hydro    | 5368         | 2160        | 1642        | 47.54         | 1981        |
| <b>Total Regional Hydro</b> | <b>15500</b> | <b>9166</b> | <b>4803</b> | <b>151.96</b> | <b>6332</b> |

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

| Element                | Peak(20:00 Hrs) | Off Peak(03:00 Hrs) | Maximum Interchange (MW) |        | Energy (MU)  |             | Net Energy MU |
|------------------------|-----------------|---------------------|--------------------------|--------|--------------|-------------|---------------|
|                        | MW              | MW                  | Import                   | Export | Import       | Export      |               |
| Vindhychal B/B         | 0               | -100                | 0                        | 100    | 0.00         | 1.14        | -1.14         |
| Gwalior-Agra (D/C)     | 502             | 629                 | 1071                     | 0      | 15.03        | 0.00        | 15.03         |
| Zerda-Kankroli         | -32             | -123                | 36                       | 213    | 0.00         | 1.33        | -1.33         |
| Zerda-Bhinmal          | -18             | -162                | 123                      | 188    | 0.00         | 1.97        | -1.97         |
| Malanpur-Auraiya       | -90             | -10                 | 0                        | 125    | 0.00         | 0.59        | -0.59         |
| Badod-Kota/Morak       | 18              | 23                  | 40                       | 34     | 0.30         | 0.00        | 0.30          |
| <b>Sub Total WR</b>    | <b>380</b>      | <b>257</b>          |                          |        | <b>15.33</b> | <b>5.03</b> | <b>10.30</b>  |
| Pusauli Bypass         | -105            | -129                | 137                      | 304    | 0.23         | 2.40        | -2.17         |
| MZP- GKP (D/C)         | 450             | 414                 | 710                      | 0      | 10.19        | 0.00        | 10.19         |
| Patna-Balia(D/C)       | 247             | 262                 | 345                      | 0      | 5.74         | 0.00        | 5.74          |
| B'Sharif-Balia (D/C)   | 171             | 187                 | 303                      | 0      | 4.44         | 0.00        | 4.44          |
| Barh - Balia(D/C)      | 299             | 314                 | 410                      | 0      | 6.70         | 0.00        | 6.70          |
| Pusauli-Balia          | 0               | 0                   | 0                        | 0      | 0.00         | 0.00        | 0.00          |
| Gaya-Fatehpur (765 Kv) | 0               | 0                   | 0                        | 0      | 0.00         | 0.00        | 0.00          |
| Pusauli-Sahupuri       | 138             | 141                 | 191                      | 0      | 3.36         | 0.00        | 3.36          |
| K'nasa-Sahupuri        | 48              | 60                  | 60                       | 0      | 0.10         | 0.00        | 0.10          |
| Son Ngr-Rihand         | -42             | -34                 | 0                        | 49     | 0.00         | 0.95        | -0.95         |
| Garhwa-Rihand          | 0               | 0                   | 0                        | 0      | 0.00         | 0.00        | 0.00          |
| <b>Sub Total ER</b>    | <b>1206</b>     | <b>1215</b>         |                          |        | <b>30.76</b> | <b>3.35</b> | <b>27.41</b>  |
| <b>Total IR Exch</b>   | <b>1586</b>     | <b>1472</b>         |                          |        | <b>46.09</b> | <b>8.38</b> | <b>37.71</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 | Total | Through ER               | Through WR | Through ER    | Through WR |
| 24.76                 | 0.67   | 25.43 | -10.74                  | 2.62       | -8.12 | -0.57                    | 1.27       | 1.68          | -1.68      |

| Total IR Schedule (MU) |            |       | Total IR Actual (MU) |            |       | Net IR UI (MU) |            |       |
|------------------------|------------|-------|----------------------|------------|-------|----------------|------------|-------|
| Through ER             | Through WR | Total | Through ER           | Through WR | Total | Through ER     | Through WR | Total |
| 15.80                  | 1.19       | 16.99 | 27.41                | 10.30      | 37.71 | 11.61          | 9.11       | 20.71 |

**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   | 0.31   | 14.44 | 96.98       | 82.85       | 42.74   | 2.71   |

| <----- Frequency (Hz) -----> |       |         |       | Average Frequency Hz | Frequency Variation Index | Std. Dev. | Frequency in 15 Min Block |          |
|------------------------------|-------|---------|-------|----------------------|---------------------------|-----------|---------------------------|----------|
| Maximum                      |       | Minimum |       |                      |                           |           | MAX (Hz)                  | MIN (Hz) |
| Freq                         | Time  | Freq    | Time  | 49.97                | 0.26                      | 0.13      | 50.27                     | 49.66    |
| 50.69                        | 18.05 | 49.39   | 19.13 |                      |                           |           |                           |          |

**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                | 417         | 07:03 | 407          | 23:09 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Gorakhpur  | 400                | 432         | 14:04 | 405          | 23:16 | 0.0                    | 0.0     | 68.1    | 2.8     |
| Bareilly   | 400                | 425         | 08:06 | 403          | 23:14 | 0.0                    | 0.0     | 2.5     | 0.0     |
| Kanpur     | 400                | 420         | 07:02 | 404          | 22:25 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Dadri      | 400                | 422         | 08:02 | 409          | 15:48 | 0.0                    | 0.0     | 4.4     | 0.0     |
| Ballabgarh | 400                | 424         | 03:23 | 409          | 19:11 | 0.0                    | 0.0     | 13.6    | 0.0     |
| Bawana     | 400                | 425         | 08:03 | 408          | 19:13 | 0.0                    | 0.0     | 12.5    | 0.0     |
| Bassi      | 400                | 456         | 03:09 | 412          | 05:54 | 0.0                    | 0.0     | 44.7    | 0.0     |
| Hissar     | 400                | 415         | 08:03 | 401          | 19:11 | 0.0                    | 0.0     | 0.0     | 0.0     |
| Moga       | 400                | 424         | 03:08 | 409          | 19:10 | 0.0                    | 0.0     | 11.1    | 0.0     |
| Abdullapur | 400                | 427         | 08:03 | 286          | 19:12 | 0.2                    | 0.2     | 35.5    | 0.0     |
| Nalagarh   | 400                | 424         | 08:03 | 408          | 19:12 | 0.0                    | 0.0     | 8.2     | 0.0     |
| Kishenpur  | 400                | 421         | 03:04 | 402          | 19:58 | 0.0                    | 0.0     | 1.8     | 0.0     |
| Wagoora    | 400                | 409         | 03:06 | 385          | 20:32 | 0.0                    | 14.1    | 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   | 474.68             | 345.61      | 483.34    | 544.27      | 337.30        | 362.54       |
| Pong              | 426.72     | 384.05   | 403.37             | 296.79      | 410.92    | 524.54      | 58.42         | 5.75         |
| Tehri             | 829.79     | 740.04   | 756.75             | 98.32       | 818.65    | 982.26      | 81.30         | 200.00       |
| Koteshwar         | 612.50     | 598.50   | 610.20             | 4.89        | NA        | NA          | 215.00        | 191.00       |
| Chamera-I         | 760.00     | 748.75   | 754.30             | NA          | NA        | NA          | 235.47        | 242.40       |
| Rihand            | 268.22     | 252.98   | 258.32             | 226.70      | 245.78    | 67.80       | 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   | 497.01             | NA          | 508.44    | NA          | 258.59        | 231.38       |

\* NA: Not Available

**IX. System Constraints:**

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

**XI. Weather Conditions For 27.04.2012 :**

1.Rains & Strom in J&K , HP , Some part of Punjab,Haryana & NCR region.

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

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

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

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

Report for : 27.04.2012

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER