

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पारदर्शिता की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 23.04.2015
Date of Reporting : 24.04.2015

I. Regional Availability/Demand:

| Evening Peak (20:00 Hrs) MW | | | | Off Peak (03:00 Hrs) MW | | | | Day Energy (Net MU) | |
|-----------------------------|----------|-------------|------------|-------------------------|----------|-------------|------------|---------------------|----------|
| Demand Met | Shortage | Requirement | Freq* (Hz) | Demand Met | Shortage | Requirement | Freq* (Hz) | Demand Met | Shortage |
| 38977 | 1979 | 40956 | 0.00 | 35781 | 1121 | 36902 | 50.09 | 851.7 | 43.61 |

* 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 | 39.31 | 5.44 | | 44.75 | 67.38 | 68.50 | 1.12 | 113.24 | 0.00 |
| Haryana | 27.41 | 0.68 | | 28.09 | 84.01 | 83.21 | -0.80 | 111.29 | 0.00 |
| Rajasthan | 109.57 | 0.00 | 7.95 | 117.52 | 62.42 | 62.99 | 0.57 | 180.51 | 0.00 |
| Delhi | 24.02 | | | 24.02 | 62.25 | 62.02 | -0.24 | 86.04 | 0.14 |
| UP | 146.46 | 3.29 | | 149.75 | 108.65 | 109.01 | 0.35 | 258.75 | 34.87 |
| Uttarakhand | | 11.35 | | 11.35 | 22.30 | 24.24 | 1.94 | 35.59 | 1.20 |
| HP | | 13.69 | | 13.69 | 10.58 | 10.97 | 0.39 | 24.66 | 0.00 |
| J & K | | 13.76 | 0.00 | 13.76 | 21.57 | 23.26 | 1.68 | 37.01 | 7.40 |
| Chandigarh | | | | 0.00 | 4.64 | 4.58 | 0.27 | 4.58 | 0.00 |
| Total | 346.76 | 48.20 | 7.95 | 402.91 | 443.81 | 448.77 | 5.29 | 851.68 | 43.61 |

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

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

| State | Evening Peak (20:00 Hrs) MW | | | | Off Peak (03:00 Hrs) MW | | | | # Max(hourly) Demand Met of Day (MW) |
|--------------|-----------------------------|-------------|------------|---------------------|-------------------------|-------------|------------|---------------------|--------------------------------------|
| | Demand Met | Shortage | UI | STOA/PX transaction | Demand Met | Shortage | UI | STOA/PX transaction | |
| Punjab | 5506 | 0 | -16 | 62 | 5293 | 0 | 168 | 332 | 5549 |
| Haryana | 5857 | 0 | -89 | 411 | 4284 | 0 | 115 | 82 | 5857 |
| Rajasthan | 7591 | 0 | 101 | 520 | 7599 | 0 | -4 | 344 | 8123 |
| Delhi | 3904 | 0 | -55 | 35 | 3346 | 0 | 102 | -227 | 4126 |
| UP | 11364 | 1560 | 83 | 238 | 11511 | 850 | 21 | 197 | 11563 |
| Uttarakhand | 1745 | 75 | 142 | 456 | 1405 | 0 | 101 | 378 | 1745 |
| HP | 1069 | 0 | -70 | -735 | 845 | 0 | 107 | -238 | 1224 |
| J&K | 1720 | 344 | 113 | -141 | 1356 | 271 | 29 | -126 | 1858 |
| Chandigarh | 222 | 0 | 5 | 0 | 143 | 0 | -5 | 0 | 229 |
| Total | 38977 | 1979 | 214 | 846 | 35781 | 1121 | 633 | 741 | 39717 |

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

III. Regional Entities :

| Entity | Station/ Constituent | Inst. Capacity (Effective) MW | Declared Capacity(MW) | Peak MW (Gross) | Off Peak MW (Gross) | Energy (Net MU) | Average Sentout(MW) | Schedule Net MU | UI Net MU |
|---|----------------------------------|----------------------------------|--------------------------|--------------------|------------------------|--------------------|------------------------|--------------------|--------------|
| | | | | | | | | | |
| A. NTPC | Singrauli STPS (5*200+2*500) | 2000 | 1578 | 1739 | 1851 | 40.55 | 1690 | 37.81 | 2.74 |
| | Rihand I STPS (2*500) | 1000 | 794 | 889 | 839 | 19.40 | 808 | 17.98 | 1.42 |
| | Rihand II STPS (2*500) | 1000 | 472 | 496 | 518 | 11.70 | 488 | 10.74 | 0.96 |
| | Rihand III STPS (2*500) | 1000 | 960 | 1003 | 1001 | 22.45 | 935 | 21.21 | 1.24 |
| | Dadri I STPS (4*210) | 840 | 615 | 619 | 520 | 13.39 | 558 | 13.23 | 0.15 |
| | Dadri II STPS (2*490) | 980 | 980 | 846 | 694 | 17.97 | 749 | 18.16 | -0.19 |
| | Unchahar I TPS (2*210) | 420 | 405 | 291 | 371 | 7.61 | 317 | 8.66 | -1.05 |
| | Unchahar II TPS (2*210) | 420 | 401 | 256 | 374 | 7.21 | 300 | 7.92 | -0.71 |
| | Unchahar III TPS (1*220) | 210 | 0 | 0 | 0 | 0.00 | 0 | 0.00 | 0.00 |
| | ISTPP (Jhajjar) (3*500) | 1500 | 1500 | 930 | 613 | 15.30 | 638 | 16.38 | -1.08 |
| | Dadri GPS (4*130.19+2*154.51) | 830 | 806 | 185 | 196 | 4.54 | 189 | 4.63 | -0.09 |
| | Anta GPS (3*88.71+1*153.2) | 419 | 393 | 227 | 245 | 5.85 | 244 | 5.75 | 0.10 |
| | Auraiya GPS (4*111.19+2*109.30) | 663 | 650 | 156 | 162 | 3.77 | 157 | 3.91 | -0.14 |
| | Dadri Solar | 5 | 1 | 0 | 0 | 0.02 | 1 | 0.03 | 0.00 |
| | Unchahar Solar | 10 | 3 | 0 | 0 | 0.03 | 1 | 0.06 | -0.03 |
| | Singrauli Solar | 15 | 3 | 0 | 0 | 0.04 | 2 | 0.07 | -0.03 |
| | IKHEP | 400 | 0 | 0 | 0 | 0.00 | 0 | 0.00 | 0.00 |
| | Sub Total (A) | 11712 | 9560 | 7637 | 7384 | 170 | 7077 | 167 | 3 |
| | B. NPC | NAPS (2*220) | 440 | 387 | 416 | 433 | 9.20 | 383 | 9.29 |
| RAPS- B (2*220) | | 440 | 373 | 417 | 420 | 8.98 | 374 | 7.30 | 1.68 |
| RAPS- C (2*220) | | 440 | 410 | 439 | 446 | 9.55 | 398 | 9.84 | -0.29 |
| Sub Total (B) | | 1320 | 1170 | 1272 | 1299 | 27.73 | 1155 | 26.43 | 1.30 |
| C. NHPC | Chamera I HPS (3*180) | 540 | 535 | 538 | 542 | 12.92 | 538 | 12.84 | 0.08 |
| | Chamera II HPS (3*100) | 300 | 300 | 299 | 270 | 7.25 | 302 | 7.08 | 0.17 |
| | Chamera III HPS (3*77) | 231 | 231 | 230 | 215 | 5.49 | 229 | 5.45 | 0.04 |
| | Bairasul HPS(3*60) | 180 | 120 | 121 | 121 | 2.82 | 117 | 2.80 | 0.02 |
| | Salal-HPS (6*115) | 690 | 653 | 666 | 666 | 16.01 | 667 | 15.66 | 0.35 |
| | Tanakpur-HPS (3*40) | 94 | 44 | 49 | 43 | 1.13 | 47 | 1.07 | 0.06 |
| | Uri-I HPS (4*120) | 480 | 463 | 476 | 475 | 11.12 | 463 | 11.12 | 0.00 |
| | Uri-II HPS (4*60) | 240 | 0 | 0 | 0 | 0.00 | 0 | 0.00 | 0.00 |
| | Dhauliganga-HPS (4*70) | 280 | 188 | 138 | 0 | 2.33 | 97 | 2.21 | 0.12 |
| | Dulhasti-HPS (3*130) | 390 | 387 | 405 | 393 | 9.45 | 394 | 9.29 | 0.16 |
| | Sewa-II HPS (3*40) | 120 | 119 | 130 | 130 | 3.07 | 128 | 2.86 | 0.21 |
| | Parbati 3 (4*130) | 520 | 260 | 129 | 0 | 1.97 | 82 | 1.95 | 0.02 |
| | Sub Total (C) | 4065 | 3300 | 3181 | 2855 | 74 | 3065 | 72 | 1 |
| | D.SJVNL | NJPC (6*250) | 1500 | 1605 | 1586 | 0 | 16.47 | 686 | 16.37 |
| Rampur HEP (6*68.67) | | 412 | 430 | 430 | 0 | 4.64 | 193 | 4.53 | 0.11 |
| Sub Total (D) | | 1912 | 2035 | 2016 | 0 | 21.11 | 880 | 20.90 | 0.21 |
| E. THDC | Tehri HPS (4*250) | 1000 | 510 | 508 | 155 | 6.73 | 281 | 6.70 | 0.03 |
| | Koteshwar HPS (4*100) | 400 | 129 | 299 | 91 | 3.10 | 129 | 3.10 | 0.00 |
| | Sub Total (E) | 1400 | 639 | 807 | 246 | 9.83 | 410 | 9.80 | 0.03 |
| F. BBMB | Bhakra HPS (3*108+2*126+6*157) | 1514 | 346 | 795 | 300 | 8.23 | 343 | 8.30 | -0.07 |
| | Dehar HPS (6*165) | 990 | 605 | 660 | 560 | 14.78 | 616 | 14.53 | 0.25 |
| | Pong HPS (6*66) | 396 | 6 | 124 | 0 | 0.18 | 7 | 0.16 | 0.02 |
| | Sub Total (F) | 2900 | 958 | 1579 | 860 | 23.19 | 966 | 22.98 | 0.21 |
| G. IPP(s)/JV(s) | ALLAIN DUHANGAN HPS(IPP) (2*96) | 192 | 0 | 123 | 51 | 1.44 | 60 | 1.31 | 0.13 |
| | KARCHAM WANGTOO HPS(IPP) (4*250) | 1000 | 0 | 880 | 150 | 8.31 | 346 | 8.36 | -0.05 |
| | Malana Stg-II HPS (2*50) | 100 | 0 | 40 | 31 | 1.07 | 45 | 0.99 | 0.08 |
| | Shree Cement TPS (2*150) | 300 | 0 | 211 | 299 | 6.56 | 273 | 6.99 | -0.42 |
| | Budhil HPS(IPP) | 70 | 0 | 70 | 72 | 1.23 | 51 | 1.19 | 0.04 |
| | Sub Total (G) | 1662 | 0 | 1324 | 602 | 18.61 | 775 | 18.83 | -0.23 |
| H. Total Regional Entities (A-G) | 24972 | 17662 | 17816 | 13247 | 343.86 | 14328 | 337.82 | 6.05 | |

| I. State Entities | Station | Effective Installed Capacity (MW) | Peak MW | Off Peak MW | Energy(MU) | Average(Sent out MW) | |
|---|---|-----------------------------------|--------------|--------------|---------------|----------------------|------|
| Punjab | Guru Gobind Singh TPS (Ropar) (6*210) | 1260 | 840 | 840 | 16.94 | 706 | |
| | Guru Nanak Dev TPS(Bhatinda) (4*110) | 440 | 0 | 120 | 0.86 | 36 | |
| | Guru Harqobind Singh TPS(L.mbt) (2*210+2*250) | 920 | 478 | 469 | 10.17 | 424 | |
| | Goindwal(GVK) | | 0 | 0 | 0.00 | 0 | |
| | Rajpura (2*700) | 1400 | 678 | 651 | 11.34 | 472 | |
| | Talwandi Saboo (1*660) | 660 | 0 | 0 | 0.00 | 0 | |
| | Thermal (Total) | 4680 | 1996 | 2080 | 39.31 | 1638 | |
| | Total Hydro | 1148 | 342 | 99 | 5.44 | 226 | |
| | Total Punjab | 5828 | 2338 | 2179 | 44.75 | 1864 | |
| Haryana | Panipat TPS (4*110+2*210+2*250) | 1367 | 0 | 0 | 0.00 | 0 | |
| | DCRTPP (Yamuna nagar) (2*300) | 600 | 535 | 241 | 8.03 | 334 | |
| | Faridabad GPS (NTPC) | 432 | 0 | 0 | 0.00 | 0 | |
| | RGTPP (khedar) (IPP) (2*600) | 1200 | 0 | 0 | 0.00 | 0 | |
| | Magnum Diesel (IPP) | 25 | 0 | 0 | 0.00 | 0 | |
| | Jhajjar(CLP) (2*660) | 1320 | 1074 | 737 | 19.38 | 808 | |
| | Thermal (Total) | 4944 | 1609 | 978 | 27.41 | 1142 | |
| | Total Hydro | 62 | 24 | 25 | 0.68 | 28 | |
| | Total Haryana | 5006 | 1633 | 1003 | 28.09 | 1170 | |
| | Rajasthan | kota TPS (2*110+2*195+3*210) | 1240 | 863 | 863 | 21.27 | 886 |
| | | suratgarh TPS (6*250) | 1500 | 629 | 524 | 13.76 | 573 |
| Chabra TPS (4*250) | | 1000 | 638 | 572 | 14.83 | 618 | |
| Dholpur GPS (3*110) | | 330 | 78 | 94 | 2.00 | 83 | |
| Ramgarh GPS (1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50) | | 271 | 176 | 181 | 4.34 | 181 | |
| RAPS A (NPC) (1*100+1*200) | | 300 | 0 | 0 | 0.00 | 0 | |
| Barsingar (NLC) (2*125) | | 250 | 196 | 165 | 3.83 | 160 | |
| Giral LTPS (2*125) | | 250 | 74 | 85 | 1.71 | 71 | |
| Rajwest LTPS (IPP) (8*135) | | 1080 | 688 | 725 | 17.03 | 710 | |
| VS LIGNITE LTPS (IPP) (1*135) | | 135 | 0 | 0 | 0.00 | 0 | |
| Kalisindh Thermal(1*600) | | 600 | 178 | 355 | 5.80 | 242 | |
| Kawai(Adani) (2*660) | | 1320 | 938 | 958 | 25.00 | 1041 | |
| Thermal (Total) | | 8276 | 4458 | 4522 | 110 | 4565 | |
| Total Hydro | | 550 | 0 | 0 | 0.00 | 0 | |
| Wind power | | 2798 | 84 | 825 | 7.09 | 295 | |
| Biomass | | 99 | 29 | 29 | 0.70 | 29 | |
| Solar | | 730 | 0 | 0 | 0.17 | 7 | |
| Renewable/Others (Total) | | 3627 | 113 | 854 | 7.95 | 331 | |
| Total Rajasthan | | 12453 | 4571 | 5376 | 117.52 | 4897 | |
| UP | | Anpara TPS (3*210+2*500) | 1630 | 1309 | 1238 | 31.76 | 1324 |
| | Obra TPS (2*50+2*94+5*200) | 1194 | 466 | 345 | 10.15 | 423 | |
| | Paricha TPS (2*110+2*220+2*250) | 1140 | 764 | 805 | 18.27 | 761 | |
| | Panki TPS (2*105) | 210 | 131 | 131 | 3.13 | 130 | |
| | Harduaganj TPS (1*60+1*105+2*250) | 665 | 224 | 227 | 5.43 | 226 | |
| | Tanda TPS (NTPC) (4*110) | 440 | 285 | 385 | 8.88 | 370 | |
| | Roza TPS (IPP) (4*300) | 1200 | 1071 | 1076 | 25.61 | 1067 | |
| | Anpara-C (IPP) (2*600) | 1200 | 1080 | 1080 | 25.90 | 1079 | |
| | Bajaj Energy Pvt.Ltd(IPP) TPS (10*45) | 450 | 282 | 403 | 7.73 | 5702 | |
| | Anpara-D | 500 | 0 | 0 | 0.00 | 0 | |
| | Thermal (Total) | 8629 | 5612 | 5690 | 137 | 11083 | |
| | Vishnuparyag HPS (IPP) | 400 | 155 | 148 | 0.00 | 0 | |
| | Other Hydro | 527 | 97 | 296 | 3.29 | 137 | |
| | Cogeneration | 981 | 400 | 400 | 9.60 | 400 | |
| | Total UP | 10537 | 6264 | 6534 | 149.75 | 11620 | |
| Uttarakhand | Total Hydro | 1398 | 479 | 470 | 11.35 | 473 | |
| | Total Uttarakhand | 1398 | 479 | 470 | 11.35 | 473 | |
| Delhi | Rajghat TPS (2*67.5) | 135 | 50 | 49 | 1.12 | 46 | |
| | Delhi Gas Turbine (6x30 + 3x34) | 282 | 144 | 146 | 3.42 | 142 | |
| | Pragati Gas Turbine (2x104+ 1x122) | 330 | 270 | 265 | 6.64 | 277 | |
| | Rithala GPS (3*36) | 95 | 0 | 0 | 0.00 | 0 | |
| | Bawana GPS (6*250) | 1370 | 290 | 270 | 6.70 | 279 | |
| | Badarpur TPS (NTPC) (3*95+2*210) | 705 | 281 | 298 | 6.15 | 256 | |
| | Thermal (Total) | 2917 | 1035 | 1028 | 24.02 | 1001 | |
| Total Delhi | 2917 | 1035 | 1028 | 24.02 | 1001 | | |
| HP | Baspa HPS (IPP) (2*150) | 300 | 179 | 79 | 2.19 | 91 | |
| | Malana HPS (IPP) (2*43) | 86 | 48 | 13 | 1.07 | 44 | |
| | Other Hydro | 728 | 431 | 445 | 10.44 | 435 | |
| | Total HP | 1114 | 658 | 537 | 13.69 | 570 | |
| J & K | Baglihar HPS (IPP) (3*150) | 450 | 450 | 450 | 10.80 | 450 | |
| | Other Hydro/IPP | 436 | 112 | 126 | 2.96 | 123 | |
| | Gas/Diesel/Others | 209 | 0 | 0 | 0.00 | 0 | |
| | Total J & K | 1094 | 562 | 576 | 13.76 | 573 | |
| Total State Control Area Generation | | 40347 | 17540 | 17703 | 402.91 | 22169 | |
| J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)] | | | 5484 | 5385 | 124.18 | 5174 | |
| Total Regional Availability(Gross) | | 65319 | 40840 | 36334 | 870.96 | 41670 | |

IV. Total Hydro Generation:

| | | | | | |
|-----------------------------|--------------|--------------|-------------|---------------|-------------|
| Regional Entities Hydro | 11969 | 8627 | 4193 | 138.506035 | 5771 |
| State Control Area Hydro | 5684 | 2162 | 2003 | 48.20 | 2008 |
| Total Regional Hydro | 17654 | 10789 | 6196 | 186.70 | 7779 |

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 | 500 | 400 | 500 | 0 | 9.89 | 0.00 | 9.89 |
| Gwalior-Agra (D/C) | 1588 | 1876 | 2421 | 0 | 42.53 | 0.00 | 42.53 |
| Zerda-Kankroli | -160 | -356 | 0 | 374 | 0.00 | 6.59 | -6.59 |
| Zerda-Bhinmal | -95 | -299 | 0 | 345 | 0.00 | 4.89 | -4.89 |
| Malanpur-Auraiya | -72 | -54 | 0 | 80 | 0.00 | 1.11 | -1.11 |
| Badod-Kota/Morak | -50 | -109 | 3 | 80 | 0.00 | 1.85 | -1.85 |
| Mundra-Mohindergarh(HVDC) | 2498 | 2503 | 2506 | 0 | 60.46 | 0.00 | 60.46 |
| Vindhychal - Rihand | 478 | 516 | 516 | 0 | 10.82 | 0.00 | 10.82 |
| Sub Total WR | 4687 | 4477 | | | 123.70 | 14.44 | 109.25 |
| Pusauli Bypass | 400 | 300 | 0 | 400 | 7.93 | 0.00 | 7.93 |
| MZP- GKP (D/C) | -110 | 87 | 172 | 192 | 0.47 | 0.00 | 0.47 |
| Patna-Balia(D/C) | 657 | 269 | 657 | 0 | 11.15 | 0.00 | 11.15 |
| B'Sharif-Balia (D/C) | 53 | -17 | 61 | 87 | 0.00 | 0.40 | -0.40 |
| Pusauli-Balia | 147 | 36 | 147 | 34 | 0.85 | 0.00 | 0.85 |
| Gaya-Fatehpur (765 Kv) | -129 | 146 | 217 | 129 | 2.16 | 0.00 | 2.16 |
| Pusauli-Sahupuri | 139 | 147 | 0 | 202 | 0.00 | 3.89 | -3.89 |
| K'nasa-Sahupuri | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| Son Ngr-Rihand | -26 | -40 | 0 | 44 | 0.00 | 0.70 | -0.70 |
| Garhwa-Rihand | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| Sasaram - Fatehpur(765 KV) | -334 | -20 | 25 | 334 | 0.00 | 2.62 | -2.62 |
| Sub Total ER | 797 | 908 | | | 22.55 | 7.62 | 14.93 |
| Total IR Exch | 5484 | 5385 | | | 146.25 | 22.07 | 124.18 |

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

| ER | ISGS/LT Schedule (MU) | | Bilateral Schedule (MU) | | Power Exchange ShdI (MU) | | Wheeling (MU) | |
|-------|-----------------------|-------|-------------------------|------------|--------------------------|------------|---------------|------------|
| | Bhutan | Total | Through ER | Through WR | Through ER | Through WR | Through ER | Through WR |
| 23.17 | 1.00 | 24.17 | -0.91 | -2.05 | 10.32 | 0.73 | 0.80 | -0.80 |

| 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 |
| 34.38 | 87.27 | 121.65 | 14.93 | 109.25 | 124.18 | -19.45 | 21.98 | 2.53 |

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

| <49.2 | <49.7 | <49.8 | <49.9 | <50.0 | 49.9-50.05 | 50.05-50.10 | 50.10-50.20 | >50.20 | >50.50 |
|-------|-------|-------|-------|-------|------------|-------------|-------------|--------|--------|
| 0.00 | 0.00 | 0.31 | 7.07 | 39.18 | 56.96 | 20.03 | 14.32 | 1.70 | NA |

| <----- 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 | | | | | |
| 50.31 | 7.04 | 49.77 | 12.21 | 50.02 | 0.07 | 0.08 | 50.28 | 0 |

VII. Voltage profile 400 kV

| Station | Voltage Level (kV) | Maximum | | Minimum | | Voltage (in % of Time) | | | |
|------------|--------------------|-------------|-------|--------------|-------|------------------------|---------|---------|---------|
| | | Voltage(KV) | Time | Voltage (KV) | Time | <380 kV | <390 kV | >420 kV | >430 kV |
| Rihand | 400 | 403 | 00:00 | 401 | 07:59 | 0.0 | 0.0 | 0.0 | 0.0 |
| Gorakhpur | 400 | 415 | 17:06 | 403 | 00:35 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bareilly | 400 | 419 | 04:10 | 398 | 19:23 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kanpur | 400 | 417 | 04:15 | 397 | 19:25 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dadri | 400 | 418 | 03:50 | 402 | 19:23 | 0.1 | 0.1 | 0.0 | 0.0 |
| Ballabgarh | 400 | 425 | 03:51 | 401 | 19:25 | 0.0 | 0.0 | 21.9 | 0.0 |
| Bawana | 400 | 423 | 04:13 | 401 | 19:23 | 0.0 | 0.0 | 4.0 | 0.0 |
| Bassi | 400 | 425 | 05:02 | 401 | 22:20 | 0.0 | 0.0 | 15.3 | 0.0 |
| Hissar | 400 | 0 | 00:00 | 9999 | 00:00 | 0.0 | 0.0 | 0.0 | 0.0 |
| Moga | 400 | 421 | 16:33 | 398 | 19:26 | 0.0 | 0.0 | 1.0 | 0.0 |
| Abdullapur | 400 | 427 | 04:10 | 396 | 19:21 | 0.0 | 0.0 | 30.0 | 0.0 |
| Nalagarh | 400 | 428 | 03:01 | 403 | 19:25 | 0.0 | 0.0 | 29.7 | 0.0 |
| Kishenpur | 400 | 419 | 04:13 | 400 | 21:03 | 0.0 | 0.0 | 0.0 | 0.0 |
| Wagoora | 400 | 412 | 04:13 | 379 | 21:10 | 0.0 | 12.5 | 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 | 771 | 06:32 | 731 | 19:26 | 0.0 | 1.7 | 0.0 | 0.0 |
| Balia | 765 | 773 | 17:03 | 747 | 19:26 | 0.0 | 0.0 | 0.0 | 0.0 |
| Moga | 765 | 798 | 08:06 | 2 | 09:54 | 40.0 | 40.0 | 0.0 | 0.0 |
| Agra | 765 | 787 | 07:05 | 749 | 19:26 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bhiwani | 765 | 803 | 08:06 | 757 | 19:22 | 0.0 | 0.0 | 3.4 | 0.0 |
| Unnao | 765 | 760 | 07:03 | 724 | 19:29 | 1.0 | 24.2 | 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 (m³/s) | Usage (m³/s) |
| Bhakra | 513.59 | 445.62 | 483.28 | 544.27 | 482.93 | 527.87 | 502.31 | 240.81 |
| Pong | 426.72 | 384.05 | 404.67 | 336.10 | 402.45 | 273.51 | 171.06 | 13.05 |
| Tehri | 829.79 | 740.04 | 764.75 | 163.00 | 763.05 | 145.79 | 102.92 | 203.00 |
| Koteshwar | 612.50 | 598.50 | 611.80 | 5.48 | 611.10 | 4.95 | 203.00 | 205.00 |
| Chamera-I | 760.00 | 748.75 | 759.32 | 0.00 | 0.00 | 0.00 | 383.05 | 349.62 |
| Rihand | 268.22 | 252.98 | 841.30 | 133.70 | 848.50 | 231.70 | 0.00 | 0.00 |
| RPS | 352.80 | 343.81 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Jawahar Sagar | 298.70 | 295.78 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| RSD | 527.91 | 487.91 | 518.35 | 3.12 | 516.59 | 5.79 | 280.93 | 95.04 |

* NA: Not Available

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

| State | Off- Peak Hours (03:00 Hrs) | | | Peak Hours (20:00 Hrs) | | | Day Energy (MU) | | |
|--------------|-----------------------------|------------|-----------|------------------------|------------|-----------|-----------------|-----------------|--------------|
| | Bilateral (MW) | IEX (MW) | PXIL (MW) | Bilateral (MW) | IEX (MW) | PXIL (MW) | Bilateral (MU) | IEX / PXIL (MU) | Total (MU) |
| Punjab | -150 | 479 | 2 | -152 | 213 | 0 | -3.60 | 8.47 | 4.88 |
| Delhi | -146 | -41 | -41 | -97 | 142 | -10 | -2.56 | 2.04 | -0.52 |
| Haryana | 268 | -186 | 0 | 284 | 127 | 0 | 6.61 | -1.16 | 5.45 |
| HP | 99 | -337 | 0 | -155 | -580 | 0 | 0.85 | -9.31 | -8.46 |
| J&K | -70 | -56 | 0 | -121 | -20 | 0 | -2.67 | -0.87 | -3.54 |
| CHD | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.28 | 0.28 |
| Rajasthan | -125 | 467 | 2 | -121 | 639 | 2 | -2.94 | 13.74 | 10.80 |
| UP | 197 | 0 | 0 | 238 | 0 | 0 | 4.95 | 0.00 | 4.95 |
| Uttarakhand | 0 | 337 | 41 | 0 | 442 | 14 | 0.00 | 8.99 | 8.99 |
| Total | 72 | 664 | 5 | -124 | 964 | 6 | 0.63 | 22.18 | 22.82 |

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

| State | Bilateral (MW) | | IEX (MW) | | PXIL (MW) | |
|-------------|----------------|---------|----------|---------|-----------|---------|
| | Maximum | Minimum | Maximum | Minimum | Maximum | Minimum |
| Punjab | -150 | -152 | 510 | 3 | 2 | 0 |
| Delhi | -68 | -146 | 381 | -96 | 0 | -41 |
| Haryana | 264 | 264 | 171 | -659 | 0 | 0 |
| HP | 99 | -155 | -190 | -667 | 0 | 0 |
| J&K | -70 | -151 | 54 | -121 | 0 | 0 |
| CHD | 0 | 0 | 39 | 0 | 0 | 0 |
| Rajasthan | -121 | -125 | 878 | 362 | 2 | 2 |
| UP | 238 | 163 | 0 | 0 | 0 | 0 |
| Uttarakhand | 0 | 0 | 449 | 282 | 43 | 4 |

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 23.04.2015 :**

Normal

XIV. Synchronisation of new generating units :**XV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :****XVI. Tripping of lines in pooling stations :****XVII. Complete generation loss in a generating station :**