# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

**Power Supply Position in Northern Region for 27.11.2014**
**Date of Reporting : 28.11.2014**

### 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 |
| 38516 | 1328 | 39844 | 50.13 | 29051 | 1230 | 30281 | 50.17 | 798.6 | 34.29 |

* 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 | Actual Drawal | UI | Consumption | Shortages * |
|---|---|---|---|---|---|---|---|---|---|
| | Thermal | Hydro | Renewable/others $ | Total | (Net MU) | (Net MU) | (Net MU) | (Net MU) | (MU) |
| Punjab | 51.50 | 7.92 | | 59.42 | 44.64 | 47.76 | 3.11 | 107.18 | 0.00 |
| Haryana | 63.99 | 0.39 | | 64.37 | 49.60 | 48.16 | -1.44 | 112.53 | 0.00 |
| Rajasthan | 117.09 | 5.27 | 10.88 | 133.24 | 70.50 | 75.10 | 4.60 | 208.34 | 0.00 |
| Delhi | 19.08 | | | 19.08 | 40.26 | 39.30 | -0.96 | 58.38 | 0.00 |
| UP | 122.88 | 3.26 | | 126.14 | 86.76 | 84.99 | -1.77 | 211.13 | 34.11 |
| Uttarakhand | | 7.53 | | 7.53 | 23.87 | 24.65 | 0.78 | 32.18 | 0.18 |
| HP | | 5.55 | | 5.55 | 18.39 | 19.52 | 1.13 | 25.07 | 0.00 |
| J & K | | 6.54 | 0.00 | 6.54 | 33.06 | 33.89 | 0.83 | 40.43 | 0.00 |
| Chandigarh | | | | 0.00 | 3.21 | 3.39 | 0.19 | 3.39 | 0.00 |
| | | | | | | | | | |
| **Total** | **374.53** | **36.46** | **10.88** | **421.87** | **370.28** | **376.76** | **6.48** | **798.63** | **34.29** |

* 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 | | | | # Max(hourly) Demand Met of Day (MW) |
|---|---|---|---|---|---|---|---|---|---|
| | Demand Met | Shortage | UI | STOA/PX transaction | Demand Met | Shortage | UI | STOA/PX transaction | |
| Punjab | 5377 | 0 | 10 | -454 | 3526 | 0 | 238 | -472 | 5607 |
| Haryana | 5909 | 0 | -121 | -608 | 3922 | 0 | 87 | -583 | 5909 |
| Rajasthan | 9293 | 0 | 237 | 443 | 7911 | 0 | 37 | 1052 | 9529 |
| Delhi | 3029 | 128 | -45 | -198 | 1497 | 0 | -179 | -982 | 3183 |
| UP | 9903 | 1160 | 0 | 139 | 8672 | 1230 | 4 | 75 | 9903 |
| Uttarakhand | 1641 | 40 | 8 | 535 | 1075 | 0 | 14 | 402 | 1703 |
| HP | 1257 | 0 | 14 | 348 | 767 | 0 | 2 | 322 | 1356 |
| J&K | 1920 | 0 | 33 | 467 | 1595 | 0 | -33 | 553 | 2147 |
| Chandigarh | 187 | 0 | -2 | 0 | 86 | 0 | -2 | -30 | 187 |
| **Total** | **38516** | **1328** | **135** | **673** | **29051** | **1230** | **169** | **336** | **38516** |

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

Diversity is 1.03

### III. Regional Entities :

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

| | 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 | 1326 | 1460 | 1383 | 34.49 | 1437 | 31.83 | 2.66 |
| | Rihand I STPS (2*500) | 1000 | 858 | 863 | 947 | 21.45 | 894 | 20.59 | 0.86 |
| | Rihand II STPS (2*500) | 1000 | 970 | 1029 | 1027 | 24.14 | 1006 | 23.28 | 0.86 |
| | Rihand III STPS (2*500) | 1000 | 475 | 507 | 449 | 11.87 | 495 | 11.39 | 0.48 |
| | Dadri I STPS (4*210) | 840 | 788 | 683 | 540 | 16.42 | 684 | 15.90 | 0.53 |
| | Dadri II STPS (2*490) | 980 | 980 | 911 | 652 | 20.23 | 843 | 20.75 | -0.52 |
| | Unchahar I TPS (2*210) | 420 | 400 | 390 | 402 | 10.09 | 420 | 9.46 | 0.63 |
| | Unchahar II TPS (2*210) | 420 | 394 | 371 | 310 | 9.53 | 397 | 8.84 | 0.69 |
| | Unchahar III TPS (1*220) | 210 | 200 | 187 | 151 | 4.80 | 200 | 4.48 | 0.32 |
| | ISTPP (Jhajjhar) (3*500) | 1500 | 1500 | 1216 | 937 | 21.93 | 914 | 23.42 | -1.49 |
| | Dadri GPS (4*130.19+2*154.51) | 830 | 824 | 330 | 425 | 9.01 | 375 | 8.92 | 0.08 |
| | Anta GPS (3*88.71+1*153.2) | 419 | 410 | 290 | 248 | 8.15 | 340 | 8.36 | -0.21 |
| | Auraiya GPS (4*111.19+2*109.30) | 663 | 439 | 283 | 271 | 6.98 | 291 | 6.94 | 0.04 |
| | Dadri Solar | 5 | 1 | 0 | 0 | 0.02 | 1 | 0.03 | -0.01 |
| | Unchahar Solar | 10 | 3 | 0 | 0 | 0.03 | 1 | 0.07 | -0.04 |
| | **Sub Total (A)** | **11297** | **9568** | **8520** | **7742** | **199** | **8297** | **194** | **5** |
| **B. NPC** | NAPS (2*220) | 440 | 294 | 330 | 336 | 7.02 | 293 | 7.06 | -0.04 |
| | RAPS- B (2*220) | 440 | 408 | 451 | 450 | 9.74 | 406 | 9.79 | -0.06 |
| | RAPS- C (2*220) | 440 | 440 | 461 | 463 | 10.01 | 417 | 10.56 | -0.55 |
| | **Sub Total (B)** | **1320** | **1142** | **1242** | **1249** | **26.77** | **1115** | **27.41** | **-0.64** |
| **C. NHPC** | Chamera I HPS (3*180) | 540 | 534 | 313 | 0 | 1.68 | 70 | 1.60 | 0.08 |
| | Chamera II HPS (3*100) | 300 | 200 | 201 | 0 | 1.37 | 57 | 1.35 | 0.02 |
| | Chamera III HPS (3*77) | 231 | 231 | 228 | 0 | 0.73 | 30 | 0.70 | 0.03 |
| | Bairasuil HPS(3*60) | 180 | 110 | 60 | 0 | 0.58 | 24 | 0.59 | -0.01 |
| | Salal-HPS (6*115) | 690 | 142 | 225 | 150 | 3.56 | 148 | 3.42 | 0.14 |
| | Tanakpur-HPS (3*40) | 94 | 30 | 56 | 24 | 7.87 | 328 | 0.73 | 7.14 |
| | Uri-I HPS (4*120) | 480 | 172 | 221 | 108 | 4.24 | 176 | 4.13 | 0.11 |
| | Uri-II HPS (4*60) | 240 | 0 | 0 | 0 | 0.00 | 0 | 0.00 | 0.00 |
| | Dhauliganga-HPS (4*70) | 280 | 208 | 208 | 0 | 1.17 | 49 | 1.10 | 0.07 |
| | Dulhasti-HPS (3*130) | 390 | 387 | 380 | 0 | 3.30 | 138 | 3.20 | 0.10 |
| | Sewa-II HPS (3*40) | 120 | 79 | 72 | 0 | 0.23 | 10 | 0.24 | -0.01 |
| | Parbati 3 (4*130) | 520 | 0 | 0 | 0 | 0.00 | 0 | 0.00 | 0.00 |
| | **Sub Total (C )** | **4065** | **2093** | **1964** | **282** | **25** | **1030** | **17** | **8** |
| **D.SJVNL** | NJPC (6*250) | 1500 | 1605 | 1596 | 0 | 8.01 | 334 | 8.00 | 0.01 |
| | Rampur HEP (4*68.67) | 275 | 350 | 372 | 0 | 2.15 | 90 | 2.17 | -0.02 |
| | **Sub Total (D)** | 1775 | 1955 | 1968 | 0 | 10.16 | 423 | 10.17 | -0.01 |
| **E. THDC** | Tehri HPS (4*250) | 1000 | 1060 | 1062 | 0 | 7.59 | 316 | 7.50 | 0.09 |
| | Koteshwar HPS (4*100) | 400 | 104 | 199 | 90 | 2.50 | 104 | 2.50 | 0.00 |
| | **Sub Total (E)** | **1400** | **1164** | **1261** | **90** | **10.09** | **420** | **10.00** | **0.09** |
| **F. BBMB** | Bhakra HPS (3*108+2*126+6*157) | 1514 | 546 | 1032 | 373 | 13.55 | 565 | 13.11 | 0.44 |
| | Dehar HPS (6*165) | 990 | 120 | 165 | 0 | 2.86 | 119 | 2.87 | -0.01 |
| | Pong HPS (6*66) | 396 | 172 | 324 | 66 | 4.16 | 173 | 4.13 | 0.02 |
| | **Sub Total (F)** | **2900** | **838** | **1521** | **439** | **20.57** | **857** | **20.11** | **0.45** |
| **G. IPP(s)/JV(s)** | ALLAIN DUHANGAN HPS(IPP) (2*96) | 192 | 0 | 79 | 0 | 0.58 | 24 | 0.57 | 0.01 |
| | KARCHAM WANGTOO HPS(IPP) (4*250) | 1000 | 0 | 710 | 0 | 4.35 | 181 | 4.32 | 0.03 |
| | Malana Stg-II HPS (2*50) | 100 | 0 | 0 | 0 | 0.16 | 7 | 0.15 | 0.01 |
| | Shree Cement TPS (2*150) | 300 | 0 | 147 | 92 | 3.10 | 129 | 3.14 | -0.04 |
| | Budhil HPS(IPP) | 70 | 0 | 0 | 0 | 0.14 | 6 | 0.14 | 0.00 |
| | Sub Total (G ) | 1662 | 0 | 936 | 92 | 8.33 | 347 | 8.32 | 0.01 |
| **H. Total Regional Entities (A-G)** | | **24419** | **16760** | **17412** | **9894** | **299.76** | **12490** | **287.32** | **12.44** |

| 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 | 210 | 360 | 6.39 | 266 |
| | Guru Nanak Dev TPS(Bhatinda) (4*110) | 440 | 120 | 90 | 2.33 | 97 |
| | Guru Hargobind Singh TPS(L.mbt) (2*210+2*250) | 920 | 463 | 364 | 9.38 | 391 |
| | Goindwal(GVK) | | 0 | 0 | 0.00 | 0 |
| | Rajpura (2*700) | 1400 | 1051 | 691 | 20.86 | 869 |
| | Talwandi Saboo (1*660) | 660 | 664 | 371 | 12.54 | 523 |
| | **Thermal (Total)** | **4680** | **2508** | **1876** | **51.50** | **2146** |
| | Total Hydro | 1148 | 392 | 183 | 7.92 | 330 |
| | **Total Punjab** | **5828** | **2900** | **2059** | **59.42** | **2476** |
| **Haryana** | Panipat TPS (4*110+2*210+2*250) | 1367 | 429 | 432 | 10.26 | 428 |
| | DCRTPP (Yamuna nagar) (2*300) | 600 | 277 | 251 | 6.05 | 252 |
| | Faridabad GPS (NTPC) | 432 | 0 | 0 | 0.00 | 0 |
| | RGTPP (khedar) (IPP) (2*600) | 1200 | 1129 | 735 | 22.29 | 929 |
| | Magnum Diesel (IPP) | 25 | 0 | 0 | 0.00 | 0 |
| | Jhajjar(CLP) (2*660) | 1320 | 1171 | 744 | 25.39 | 1058 |
| | **Thermal (Total)** | **4944** | **3006** | **2162** | **63.99** | **2666** |
| | Total Hydro | 62 | 18 | 18 | 0.39 | 16 |
| | **Total Haryana** | **5006** | **3024** | **2180** | **64.37** | **2682** |
| **Rajasthan** | kota TPS (2*110+2*195+3*210) | 1240 | 918 | 768 | 20.60 | 858 |
| | suratgarh TPS (6*250) | 1500 | 941 | 786 | 20.22 | 843 |
| | Chabra TPS (3*250) | 750 | 630 | 639 | 15.71 | 655 |
| | Dholpur GPS (3*110) | 330 | 128 | 130 | 3.15 | 131 |
| | Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50) | 271 | 203 | 198 | 5.21 | 217 |
| | RAPS A (NPC) (1*100+1*200) | 300 | 175 | 160 | 4.11 | 171 |
| | Barsingsar (NLC) (2*125) | 250 | 92 | 94 | 2.17 | 91 |
| | Giral LTPS (2*125) | 250 | 81 | 74 | 1.61 | 67 |
| | Rajwest LTPS (IPP) (8*135) | 1080 | 610 | 412 | 13.65 | 569 |
| | VS LIGNITE LTPS (IPP) (1*135) | 135 | 0 | 0 | 0.00 | 0 |
| | Kalisindh Thermal(1*600) | 600 | 0 | 360 | 3.53 | 147 |
| | Kawai(Adani) (2*660) | 1320 | 1158 | 960 | 27.11 | 1130 |
| | **Thermal (Total)** | **8026** | **4936** | **4581** | **117** | **4879** |
| | Total Hydro | 550 | 268 | 163 | 5.27 | 220 |
| | Wind power | 2798 | 478 | 382 | 10.15 | 423 |
| | Biomass | 99 | 23 | 23 | 0.55 | 23 |
| | Solar | 730 | 2 | 0 | 0.18 | 7 |
| | Renewable/Others (Total) | 3627 | 503 | 405 | 10.88 | 453 |
| | **Total Rajasthan** | **12203** | **5707** | **5149** | **133.24** | **5552** |
| **UP** | Anpara TPS (3*210+2*500) | 1630 | 940 | 931 | 22.40 | 933 |
| | Obra TPS (2*50+2*94+5*200) | 1194 | 314 | 448 | 9.60 | 400 |
| | Paricha TPS (2*110+2*220+2*250) | 1140 | 795 | 769 | 18.90 | 788 |
| | Panki TPS (2*105) | 210 | 140 | 144 | 3.30 | 138 |
| | Harduaganj TPS (1*60+1*105+2*250) | 665 | 479 | 490 | 11.50 | 479 |
| | Tanda TPS (NTPC) (4*110) | 440 | 280 | 280 | 7.00 | 292 |
| | Roza TPS (IPP) (4*300) | 1200 | 820 | 779 | 19.40 | 808 |
| | Anpara-C (IPP) (2*600) | 1200 | 999 | 960 | 23.80 | 992 |
| | Bajaj Energy Pvt.Ltd(IPP) TPS (10*45) | 450 | 280 | 280 | 6.50 | 271 |
| | **Thermal (Total)** | **8129** | **5047** | **5081** | **122.40** | **5100** |
| | Vishnuparyag HPS (IPP) | 400 | 103 | 98 | 2.36 | 98 |
| | Other Hydro | 527 | 57 | 29 | 0.90 | 38 |
| | Cogeneration | 981 | 200 | 200 | 0.48 | 20 |
| | **Total UP** | **10037** | **5407** | **5408** | **126.14** | **5158** |
| **Uttarakhand** | Total Hydro | 1398 | 487 | 212 | 7.53 | 314 |
| | **Total Uttarakhand** | **1398** | **487** | **212** | **7.53** | **314** |
| **Delhi** | Rajghat TPS (2*67.5) | 135 | 0 | 0 | 0.01 | 0 |
| | Delhi Gas Turbine (6x30 + 3x34) | 282 | 81 | 80 | 1.91 | 80 |
| | Pragati Gas Turbine (2x104+ 1x122) | 330 | 148 | 154 | 3.65 | 152 |
| | Rithala GPS (3*36) | 95 | 0 | 0 | 0.00 | 0 |
| | Bawana GPS (6*250) | 1370 | 315 | 271 | 7.29 | 304 |
| | Badarpur TPS (NTPC) (3*95+2*210) | 705 | 215 | 301 | 6.22 | 259 |
| | Thermal (Total) | 2917 | 759 | 806 | 19.08 | 795 |
| | **Total Delhi** | **2917** | **759** | **806** | **19.08** | **795** |
| **HP** | Baspa HPS (IPP) (2*150) | 300 | 30 | 0 | 1.38 | 57 |
| | Malana HPS (IPP) (2*43) | 86 | 43 | 0 | 0.25 | 10 |
| | Other Hydro | 728 | 158 | 101 | 3.93 | 164 |
| | **Total HP** | **1114** | **231** | **101** | **5.55** | **231** |
| **J & K** | Baglihar HPS (IPP) (3*150) | 450 | 291 | 148 | 4.67 | 195 |
| | Other Hydro/IPP | 436 | 97 | 70 | 1.86 | 78 |
| | Gas/Diesel/Others | 209 | 0 | 0 | 0.00 | 0 |
| | **Total J & K** | **1094** | **388** | **218** | **6.54** | 272 |
| **Total State Control Area Generation** | | **39597** | **18903** | **16133** | **421.87** | **17480** |
| **J. Net Inter Regional Exchange** [Import (+ve)/Export (-ve)] | | | **3871** | **3699** | **114.48** | **4770** |
| **Total Regional Availability(Gross)** | | **64017** | **40186** | **29726** | **836.11** | **34740** |

**IV. Total Hydro Generation:**

| | | | | | |
|---|---|---|---|---|---|
| **Regional Entities Hydro** | **11432** | **7503** | **811** | **70.62** | **2943** |
| **State Control Area Hydro** | **5684** | **1841** | **924** | **36.46** | **1421** |
| **Total Regional Hydro** | **17116** | **9344** | **1735** | **107.08** | **4364** |

**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 |
|---|---|---|---|---|---|---|---|
| | MW | MW | Import | Export | Import | Export | MU |
| Vindhychal B/B | -100 | -300 | 50 | 300 | 3.93 | 0.18 | 3.75 |
| Gwalior-Agra (D/C) | 1363 | 1180 | 1876 | 0 | 34.85 | 0.00 | 34.85 |
| Zerda-Kankroli | -50 | -162 | 5 | 179 | 0.00 | 2.13 | -2.13 |
| Zerda-Bhinmal | 32 | -80 | 131 | 141 | 0.00 | 0.05 | -0.05 |
| Malanpur-Auraiya | -79 | -127 | 0 | 137 | 0.00 | 2.71 | -2.71 |
| Badod-Kota/Morak | -1 | -140 | 23 | 105 | 0.00 | 3.15 | -3.15 |
| Mundra-Mohindergarh(HVDC) | 1249 | 1699 | 1903 | 0 | 34.85 | 0.00 | 34.85 |
| Vindhyachal - Rihand | 490 | 369 | 508 | 0 | 10.93 | 0.00 | 10.93 |
| **Sub Total WR** | **2904** | **2439** | | | **84.56** | **8.22** | **76.34** |
| Pusauli Bypass | 400 | 400 | 400 | 0 | 9.75 | 0.00 | 9.75 |
| MZP- GKP (D/C) | 66 | 122 | 362 | 0 | 4.05 | 0.00 | 4.05 |
| Patna-Balia(D/C) | 597 | 577 | 823 | 0 | 16.18 | 0.00 | 16.18 |
| B'Sharif-Balia (D/C) | -84 | 22 | 182 | 111 | 0.99 | 0.00 | 0.99 |
| Pusauli-Balia | -162 | -118 | 0 | 162 | 0.00 | 2.63 | -2.63 |
| Gaya-Fatehpur (765 Kv) | 127 | 168 | 390 | 0 | 6.19 | 0.00 | 6.19 |
| Pusauli-Sahupuri | 80 | 121 | 139 | 0 | 2.53 | 0.00 | 2.53 |
| K'nasa-Sahupuri | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| Son Ngr-Rihand | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| Garhwa-Rihand | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| Sasaram - Fatehpur(765 KV) | -57 | -32 | 165 | 57 | 1.10 | 0.00 | 1.10 |
| **Sub Total ER** | **967** | **1260** | | | **40.78** | **2.63** | **38.14** |
| **Total IR Exch** | **3871** | **3699** | | | **125.33** | **10.85** | **114.48** |

**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 |
| 20.47 | 0.67 | 21.14 | 3.95 | -14.41 | 7.74 | 14.53 | 4.97 | -4.97 |

| Total IR Schedule (MU) | | | Total IR Actual (MU) | | | Net IR UI (MU) | | |
|---|---|---|---|---|---|---|---|---|
| Through ER | Through WR Incids Mndra | Total | Through ER | Through WR | Total | Through ER | Through WR | Total |
| 37.79 | 62.12 | 99.91 | 38.14 | 76.34 | 114.48 | 0.35 | 14.22 | 14.57 |

**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 | 0.32 | 1.26 | 11.58 | 40.10 | 50.01 | 19.77 | 17.20 | 1.48 | NA |

| <---------- Frequency (Hz) ----------> | | | | Average | Frequency | Std. Dev. | Frequency in 15 Min Block | |
|---|---|---|---|---|---|---|---|---|
| Maximum | | Minimum | | Frequency | Variation | | MAX | MIN |
| Freq | Time | Freq | Time | Hz | Index | | (Hz) | (Hz) |
| 50.26 | 13.03 | 49.58 | 17.40 | 50.02 | 0.09 | 0.09 | 50.27 | 49.83 |

**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 | 411 | 00:00 | 402 | 07:13 | 0.0 | 0.0 | 0.0 | 0.0 |
| Gorakhpur | 400 | 411 | 20:57 | 396 | 17:41 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bareilly | 400 | 422 | 21:00 | 396 | 14:52 | 0.0 | 0.0 | 0.3 | 0.0 |
| Kanpur | 400 | 419 | 05:03 | 402 | 10:37 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dadri | 400 | 420 | 01:58 | 403 | 09:56 | 0.0 | 0.0 | 0.0 | 0.0 |
| Ballabhgarh | 400 | 428 | 04:02 | 408 | 09:35 | 0.0 | 0.0 | 34.6 | 0.0 |
| Bawana | 400 | 426 | 04:17 | 407 | 10:34 | 0.0 | 0.0 | 32.3 | 0.0 |
| Bassi | 400 | 425 | 20:32 | 392 | 07:09 | 0.0 | 0.0 | 7.2 | 0.0 |
| Hissar | 400 | 415 | 04:17 | 395 | 10:52 | 0.0 | 0.0 | 0.0 | 0.0 |
| Moga | 400 | 423 | 04:16 | 402 | 07:31 | 0.0 | 0.0 | 8.8 | 0.0 |
| Abdullapur | 400 | 425 | 04:16 | 396 | 11:46 | 0.0 | 0.0 | 18.5 | 0.0 |
| Nalagarh | 400 | 426 | 20:58 | 400 | 16:29 | 0.0 | 0.0 | 16.9 | 0.0 |
| Kishenpur | 400 | 428 | 04:16 | 391 | 18:26 | 0.0 | 0.0 | 19.5 | 0.0 |
| Wagoora | 400 | 408 | 04:16 | 363 | 18:26 | 21.6 | 47.5 | 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 | 775 | 20:59 | 740 | 09:28 | 0.0 | 1.3 | 0.0 | 0.0 |
| Balia | 765 | 770 | 05:03 | 746 | 10:38 | 0.0 | 0.0 | 0.0 | 0.0 |
| Moga | 765 | 801 | 04:16 | 764 | 07:31 | 0.0 | 0.0 | 0.5 | 0.0 |
| Agra | 765 | 793 | 05:02 | 756 | 10:35 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bhiwani | 765 | 807 | 20:58 | 772 | 07:11 | 0.0 | 0.0 | 17.5 | 0.0 |
| Unnao | 765 | 759 | 05:02 | 732 | 10:42 | 0.0 | 29.7 | 0.0 | 0.0 |

**IX. Reservior Parameters:**

| Name of Reservior | Parameters | | Present Parameters | | Last Year | | Last day | |
|---|---|---|---|---|---|---|---|---|
| | FRL (m) | MDDL (m) | Level (m) | Energy (MU) | Level (m) | Energy (MU) | Inflow ($m^3$/s) | Usage ($m^3$/s) |
| Bhakra | 513.59 | 445.62 | 503.56 | 1245.57 | 508.34 | 1470.42 | 132.13 | 390.23 |
| Pong | 426.72 | 384.05 | 410.57 | 514.41 | 417.36 | 768.49 | 67.08 | 269.21 |
| Tehri | 829.79 | 740.04 | 818.85 | 982.26 | 820.85 | 1023.38 | 63.20 | 169.00 |
| Koteshwar | 612.50 | 598.50 | 609.94 | 4.44 | 609.80 | 4.50 | 169.00 | 0.00 |
| Chamera-I | 760.00 | 748.75 | 759.55 | 0.00 | 0.00 | 0.00 | 46.80 | 45.04 |
| Rihand | 268.22 | 252.98 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| RPS | 352.80 | 343.81 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Jawahar Sagar | 298.70 | 295.78 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| RSD | 527.91 | 487.91 | 509.47 | 2.31 | 515.12 | 3.90 | 58.30 | 111.08 |

*** NA: Not Available**

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

| State | Off- Peak Hours (03:00 Hrs) | | | Peak Hours (19:00 Hrs) | | | Day Energy (MU) | | |
|---|---|---|---|---|---|---|---|---|---|
| | Bilateral (MW) | IEX (MW) | PXIL (MW) | Bilateral (MW) | IEX (MW) | PXIL (MW) | Bilateral (MU) | IEX / PXIL (MU) | Total (MU) |
| Punjab | -482 | 11 | 0 | -457 | 3 | 0 | -11.17 | 0.61 | -10.56 |
| Delhi | -926 | -41 | -15 | -595 | 412 | -15 | -15.06 | 3.55 | -11.51 |
| Haryana | -778 | 195 | 0 | -762 | 155 | 0 | -19.80 | 3.93 | -15.88 |
| HP | 423 | -102 | 0 | 399 | -51 | 0 | 9.51 | -3.36 | 6.15 |
| J&K | 430 | 123 | 0 | 335 | 132 | 0 | 7.56 | 3.10 | 10.67 |
| CHD | -30 | 0 | 0 | 0 | 0 | 0 | -0.24 | -0.01 | -0.25 |
| Rajasthan | 497 | 553 | 2 | 497 | -56 | 2 | 11.92 | 9.90 | 21.82 |
| UP | 75 | 0 | 0 | 139 | 0 | 0 | 2.65 | 0.00 | 2.65 |
| Uttarakhand | 196 | 206 | 0 | 196 | 339 | 0 | 4.70 | 7.48 | 12.18 |
| **Total** | **-596** | **946** | **-13** | **-249** | **935** | **-13** | **-9.93** | **25.20** | **15.27** |

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

| State | Bilateral (MW) | | IEX (MW) | | PXIL (MW) | |
|---|---|---|---|---|---|---|
| | Maximum | Minimum | Maximum | Minimum | Maximum | Minimum |
| Punjab | -457 | -482 | 222 | 0 | 0 | 0 |
| Delhi | -485 | -926 | 504 | -56 | -15 | -15 |
| Haryana | -762 | -982 | 197 | 120 | 0 | 0 |
| HP | 423 | 379 | 49 | -702 | 0 | 0 |
| J&K | 430 | 237 | 186 | 34 | 0 | 0 |
| CHD | 0 | -30 | 15 | -10 | 0 | 0 |
| Rajasthan | 497 | 497 | 760 | -59 | 2 | 2 |
| UP | 154 | 75 | 0 | 0 | 0 | 0 |
| Uttarakhand | 196 | 196 | 426 | 206 | 0 | 0 |

**XI. System Constraints:**

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

**XIII. Weather Conditions For 27.11.2014 :**

Normal

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

**0.00**

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

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

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

**Report for : 27.11.2014** **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**