# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

### Power Supply Position in Northern Region for 10.10.2015
### Date of Reporting : 11.10.2015

**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 |
| 44454 | 1334 | 45788 | 50.04 | 38727 | 2241 | 40968 | 50.11 | 977.9 | 43.39 |

* 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 | 72.17 | 12.35 | | 84.52 | 70.28 | 69.20 | -1.07 | 153.72 | 0.00 |
| Haryana | 63.31 | 0.52 | | 63.82 | 90.59 | 89.30 | -1.29 | 153.13 | 0.00 |
| Rajasthan | 114.84 | 1.19 | 34.12 | 150.15 | 52.12 | 52.14 | 0.02 | 202.29 | 0.00 |
| Delhi | 14.24 | | | 14.24 | 73.54 | 71.07 | -2.47 | 85.32 | 0.06 |
| UP | 144.38 | 11.70 | | 156.08 | 125.30 | 121.67 | -3.63 | 277.74 | 33.95 |
| Uttarakhand | | 16.32 | | 16.32 | 18.90 | 20.06 | 1.16 | 36.39 | 0.06 |
| HP | | 9.85 | | 9.85 | 15.39 | 15.59 | 0.19 | 25.44 | 0.00 |
| J & K | | 11.81 | 0.00 | 11.81 | 26.26 | 27.74 | 1.48 | 39.55 | 9.33 |
| Chandigarh | | | | 0.00 | 4.42 | 4.30 | 0.27 | 4.30 | 0.00 |
| | | | | | | | | | |
| **Total** | **408.94** | **63.74** | **34.12** | **506.79** | **476.80** | **471.07** | **-5.34** | **977.86** | **43.39** |

* 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 (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 | 7023 | 0 | -164 | 76 | 5798 | 0 | 105 | 32 | 7023 |
| Haryana | 7448 | 0 | 64 | 265 | 5231 | 0 | 52 | 276 | 7448 |
| Rajasthan | 8726 | 0 | 85 | 190 | 8744 | 0 | 118 | 321 | 9206 |
| Delhi | 4069 | 0 | 2 | 348 | 3565 | 0 | 80 | 285 | 4069 |
| UP | 12104 | 860 | -464 | 282 | 11513 | 1980 | -203 | 410 | 12504 |
| Uttarakhand | 1767 | 0 | -12 | 223 | 1380 | 0 | 159 | 209 | 1819 |
| HP | 1202 | 0 | 50 | -545 | 875 | 0 | 22 | 136 | 1234 |
| J&K | 1896 | 474 | 119 | -4 | 1480 | 261 | 129 | -39 | 1896 |
| Chandigarh | 219 | 0 | -16 | 0 | 141 | 0 | 3 | 0 | 228 |
| **Total** | **44454** | **1334** | **-336** | **835** | **38727** | **2241** | **465** | **1630** | **44454** |

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

Diversity is 1.02

**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 | 1883 | 2058 | 2034 | 45.06 | 1878 | 44.76 | 0.30 |
| | Rihand I STPS (2*500) | 1000 | 857 | 972 | 905 | 20.16 | 840 | 20.19 | -0.03 |
| | Rihand II STPS (2*500) | 1000 | 943 | 1001 | 1016 | 21.90 | 913 | 21.95 | -0.04 |
| | Rihand III STPS (2*500) | 1000 | 480 | 512 | 505 | 11.04 | 460 | 11.17 | -0.13 |
| | Dadri I STPS (4*210) | 840 | 800 | 429 | 418 | 10.86 | 452 | 10.94 | -0.09 |
| | Dadri II STPS (2*490) | 980 | 970 | 838 | 721 | 18.37 | 766 | 19.04 | -0.66 |
| | Unchahar I TPS (2*210) | 420 | 200 | 214 | 168 | 4.22 | 176 | 4.63 | -0.41 |
| | Unchahar II TPS (2*210) | 420 | 400 | 414 | 333 | 8.48 | 353 | 9.08 | -0.60 |
| | Unchahar III TPS (1*220) | 210 | 200 | 206 | 132 | 3.81 | 159 | 4.32 | -0.51 |
| | ISTPP (Jhajjhar) (3*500) | 1500 | 1436 | 1004 | 763 | 18.72 | 780 | 19.23 | -0.51 |
| | Dadri GPS (4*130.19+2*154.51) | 830 | 670 | 383 | 377 | 8.77 | 366 | 9.12 | -0.34 |
| | Anta GPS (3*88.71+1*153.2) | 419 | 397 | -1 | -1 | 0.00 | 0 | 0.00 | 0.00 |
| | Auraiya GPS (4*111.19+2*109.30) | 663 | 530 | 260 | 286 | 6.28 | 261 | 6.41 | -0.13 |
| | Dadri Solar | 5 | 1 | 0 | 0 | 0.02 | 1 | 0.02 | 0.00 |
| | Unchahar Solar | 10 | 3 | 0 | 0 | 0.03 | 1 | 0.06 | -0.03 |
| | Singrauli Solar | 15 | 3 | 0 | 0 | 0.04 | 2 | 0.08 | -0.03 |
| | KHEP | 800 | 845 | 657 | 0 | 8.38 | 349 | 6.89 | 1.50 |
| | **Sub Total (A)** | **12112** | **10618** | **8947** | **7657** | **186** | **7756** | **188** | **-2** |
| **B. NPC** | NAPS (2*220) | 440 | 220 | 210 | 216 | 4.47 | 186 | 5.28 | -0.81 |
| | RAPS- B (2*220) | 440 | 396 | 438 | 444 | 9.54 | 398 | 9.50 | 0.04 |
| | RAPS- C (2*220) | 440 | 206 | 228 | 230 | 4.79 | 200 | 4.94 | -0.15 |
| | **Sub Total (B)** | **1320** | **822** | **876** | **890** | **18.80** | **784** | **19.73** | **-0.92** |
| **C. NHPC** | Chamera I HPS (3*180) | 540 | 537 | 365 | 0 | 5.01 | 209 | 4.80 | 0.21 |
| | Chamera II HPS (3*100) | 300 | 284 | 301 | 0 | 2.63 | 110 | 2.63 | 0.00 |
| | Chamera III HPS (3*77) | 231 | 229 | 233 | 0 | 1.85 | 77 | 1.70 | 0.15 |
| | Bairasuil HPS(3*60) | 180 | 179 | 181 | 0 | 1.01 | 42 | 0.97 | 0.04 |
| | Salal-HPS (6*115) | 690 | 240 | 459 | 222 | 6.33 | 264 | 5.77 | 0.56 |
| | Tanakpur-HPS (3*40) | 94 | 56 | 61 | 61 | 1.48 | 62 | 1.33 | 0.15 |
| | Uri-I HPS (4*120) | 480 | 289 | 263 | 263 | 7.58 | 316 | 6.97 | 0.61 |
| | Uri-II HPS (4*60) | 240 | 168 | 242 | 162 | 4.17 | 174 | 4.03 | 0.13 |
| | Dhauliganga-HPS (4*70) | 280 | 280 | 280 | 0 | 2.57 | 107 | 2.38 | 0.19 |
| | Dulhasti-HPS (3*130) | 390 | 322 | 269 | 136 | 6.79 | 283 | 6.64 | 0.15 |
| | Sewa-II HPS (3*40) | 120 | 119 | 129 | 0 | 1.02 | 42 | 0.80 | 0.22 |
| | Parbati 3 (4*130) | 520 | 282 | 132 | 0 | 0.81 | 34 | 0.85 | -0.04 |
| | **Sub Total (C )** | **4065** | **2985** | **2915** | **844** | **41** | **1719** | **39** | **2** |
| **D.SJVNL** | NJPC (6*250) | 1500 | 1605 | 1521 | 0 | 15.29 | 637 | 15.28 | 0.01 |
| | Rampur HEP (6*68.67) | 412 | 360 | 372 | 0 | 4.33 | 180 | 4.18 | 0.14 |
| | **Sub Total (D)** | **1912** | **1965** | **1893** | **0** | **19.62** | **817** | **19.46** | **0.16** |
| **E. THDC** | Tehri HPS (4*250) | 1000 | 1080 | 814 | 0 | 11.84 | 493 | 11.66 | 0.18 |
| | Koteshwar HPS (4*100) | 400 | 146 | 302 | 92 | 3.94 | 164 | 3.90 | 0.04 |
| | **Sub Total (E)** | **1400** | **1226** | **1116** | **92** | **15.78** | **658** | **15.56** | **0.22** |
| **F. BBMB** | Bhakra HPS (2*108+3*126+5*157) | 1379 | 756 | 1200 | 526 | 17.89 | 745 | 18.14 | -0.25 |
| | Dehar HPS (6*165) | 990 | 288 | 660 | 165 | 7.12 | 297 | 6.91 | 0.21 |
| | Pong HPS (6*66) | 396 | 277 | 384 | 258 | 6.52 | 272 | 6.64 | -0.11 |
| | **Sub Total (F)** | **2765** | **1320** | **2244** | **949** | **31.53** | **1314** | **31.68** | **-0.15** |
| **G. IPP(s)/JV(s)** | ALLAIN DUHANGAN HPS(IPP) (2*96) | 192 | 0 | 96 | 71 | 1.20 | 50 | 1.15 | 0.05 |
| | KARCHAM WANGTOO HPS(IPP) (4*250) | 1000 | 0 | 770 | 210 | 8.34 | 348 | 8.07 | 0.27 |
| | Malana Stg-II HPS (2*50) | 100 | 0 | 105 | 25 | 0.61 | 25 | 0.57 | 0.04 |
| | Shree Cement TPS (2*150) | 300 | 0 | 143 | 141 | 3.45 | 144 | 3.65 | -0.20 |
| | Budhil HPS(IPP) (2*35) | 70 | 0 | 76 | 0 | 0.53 | 22 | 0.49 | 0.04 |
| | Sub Total (G ) | 1662 | 0 | 1190 | 448 | 14.13 | 589 | 13.93 | 0.20 |
| **H. Total Regional Entities (A-G)** | | **25237** | **18936** | **19182** | **10879** | **327.26** | **13636** | **327.11** | **0.15** |

| 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 | 670 | 640 | 15.94 | 664 |
| | Guru Nanak Dev TPS(Bhatinda) (2*110+2*120) | 460 | 200 | 200 | 4.54 | 189 |
| | Guru Hargobind Singh TPS(L.mbt) (2*210+2*250) | 920 | 799 | 811 | 18.80 | 783 |
| | Goindwal(GVK) | | 0 | 0 | 0.00 | 0 |
| | Rajpura (2*700) | 1400 | 1381 | 1062 | 28.44 | 1185 |
| | Talwandi Saboo (1*660) | 660 | 0 | 348 | 4.45 | 185 |
| | **Thermal (Total)** | **4700** | **3050** | **3061** | **72.17** | **3007** |
| | Total Hydro | 1000 | 477 | 487 | 12.35 | 515 |
| | **Total Punjab** | **5700** | **3527** | **3548** | **84.52** | **3522** |
| **Haryana** | Panipat TPS (4*110+2*210+2*250) | 1367 | 647 | 394 | 13.29 | 554 |
| | DCRTPP (Yamuna nagar) (2*300) | 600 | 556 | 463 | 12.59 | 525 |
| | Faridabad GPS (NTPC) | 432 | 154 | 164 | 4.06 | 169 |
| | RGTPP (khedar) (IPP) (2*600) | 1200 | 576 | 774 | 21.11 | 880 |
| | Magnum Diesel (IPP) | 25 | 0 | 0 | 0.00 | 0 |
| | Jhajjar(CLP) (2*660) | 1320 | 563 | 370 | 12.26 | 511 |
| | **Thermal (Total)** | **4944** | **2496** | **2165** | **63.31** | **2638** |
| | Total Hydro | 62 | 22 | 19 | 0.52 | 21 |
| | **Total Haryana** | **5006** | **2518** | **2184** | **63.82** | **2659** |
| **Rajasthan** | kota TPS (2*110+2*195+3*210) | 1240 | 831 | 849 | 20.37 | 849 |
| | suratgarh TPS (6*250) | 1500 | 572 | 770 | 15.89 | 662 |
| | Chabra TPS (4*250) | 1000 | 374 | 379 | 9.00 | 375 |
| | Dholpur GPS (3*110) | 330 | 0 | 0 | 0.00 | 0 |
| | Ramgarh GPS (1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50) | 271 | 148 | 212 | 3.75 | 156 |
| | RAPS A (NPC) (1*100+1*200) | 300 | 160 | 161 | 3.96 | 165 |
| | Barsingsar (NLC) (2*125) | 250 | 95 | 97 | 2.19 | 91 |
| | Giral LTPS (2*125) | 250 | 97 | 91 | 1.86 | 78 |
| | Rajwest LTPS (IPP) (8*135) | 1080 | 407 | 409 | 12.05 | 502 |
| | VS LIGNITE LTPS (IPP) (1*135) | 135 | 0 | 0 | 0.00 | 0 |
| | Kalisindh Thermal(2*600) | 1200 | 924 | 880 | 22.64 | 943 |
| | Kawai(Adani) (2*660) | 1320 | 900 | 860 | 23.14 | 964 |
| | **Thermal (Total)** | **8876** | **4508** | **4708** | **115** | **4785** |
| | Total Hydro | 550 | 115 | 0 | 1.19 | 50 |
| | Wind power | 3214 | 1116 | 1512 | 31.03 | 1293 |
| | Biomass | 99 | 21 | 21 | 0.51 | 21 |
| | Solar | 730 | 0 | 0 | 2.58 | 107 |
| | Renewable/Others (Total) | 4043 | 1137 | 1533 | 34.12 | 1421 |
| | **Total Rajasthan** | **13469** | **5760** | **6241** | **150.15** | **6256** |
| **UP** | Anpara TPS (3*210+2*500) | 1630 | 1315 | 1358 | 31.80 | 1325 |
| | Obra TPS (2*50+2*94+5*200) | 1194 | 446 | 455 | 10.80 | 450 |
| | Paricha TPS (2*110+2*220+2*250) | 1140 | 580 | 584 | 14.20 | 592 |
| | Panki TPS (2*105) | 210 | 68 | 50 | 1.40 | 58 |
| | Harduaganj TPS (1*60+1*105+2*250) | 665 | 321 | 310 | 7.30 | 304 |
| | Tanda TPS (NTPC) (4*110) | 440 | 370 | 385 | 8.98 | 374 |
| | Roza TPS (IPP) (4*300) | 1200 | 1080 | 1067 | 25.70 | 1071 |
| | Anpara-C (IPP) (2*600) | 1200 | 1076 | 1085 | 25.90 | 1079 |
| | Bajaj Energy Pvt.Ltd(IPP) TPS (10*45) | 450 | 337 | 363 | 7.20 | 300 |
| | Anpara-D(1*500) | 500 | 0 | 0 | 0.00 | 0 |
| | Lalitpur TPS(1*660) | 660 | 390 | 389 | 8.70 | 363 |
| | **Thermal (Total)** | **9289** | **5983** | **6046** | **142** | **5916** |
| | Vishnuparyag HPS (IPP)(4*110) | 440 | 281 | 276 | 6.30 | 263 |
| | Alaknanada(4*82.5) | 330 | 130 | 146 | 3.40 | 142 |
| | Other Hydro | 527 | 76 | 59 | 2.00 | 83 |
| | Cogeneration | 981 | 100 | 100 | 2.40 | 100 |
| | **Total UP** | **11567** | **6570** | **6627** | **156** | **6503** |
| **Uttarakhand** | Total Hydro | 1398 | 791 | 635 | 16.32 | 680 |
| | **Total Uttarakhand** | **1398** | **791** | **635** | **16.32** | **680** |
| **Delhi** | Rajghat TPS (2*67.5) | 135 | 0 | 0 | 0.00 | 0 |
| | Delhi Gas Turbine (6x30 + 3x34) | 282 | 36 | 35 | 0.90 | 37 |
| | Pragati Gas Turbine (2x104+ 1x122) | 330 | 144 | 149 | 3.57 | 149 |
| | Rithala GPS (3*36) | 95 | 0 | 0 | 0.00 | 0 |
| | Bawana GPS (4*216+2*253) | 1370 | 259 | 250 | 6.13 | 255 |
| | Badarpur TPS (NTPC) (3*95+2*210) | 705 | 168 | 170 | 3.66 | 153 |
| | Thermal (Total) | 2917 | 607 | 604 | 14.24 | 594 |
| | **Total Delhi** | **2917** | **607** | **604** | **14.24** | **594** |
| **HP** | Baspa HPS (IPP) (3*100) | 300 | 64 | 64 | 2.51 | 105 |
| | Malana HPS (IPP) (2*43) | 86 | 45 | 45 | 0.60 | 25 |
| | Other Hydro | 878 | 286 | 261 | 6.73 | 281 |
| | **Total HP** | **1264** | **395** | **370** | **9.85** | **410** |
| **J & K** | Baglihar HPS (IPP) (3*150) | 450 | 390 | 390 | 9.36 | 390 |
| | Other Hydro/IPP | 560 | 18 | 124 | 2.45 | 102 |
| | Gas/Diesel/Others | 190 | 0 | 0 | 0.00 | 0 |
| | **Total J & K** | **1200** | **408** | **514** | **11.81** | 492 |
| **Total State Control Area Generation** | | **42521** | **20576** | **20723** | **506.79** | **21116** |
| **J. Net Inter Regional Exchange** [Import (+ve)/Export (-ve)] | | | **5837** | **7981** | **159.66** | **6652** |
| **Total Regional Availability(Gross)** | | **67758** | **45594** | **39583** | **993.71** | **41405** |

**IV. Total Hydro Generation:**

| | | | | | |
|---|---|---|---|---|---|
| **Regional Entities Hydro** | **12234** | **9796** | **2191** | **126.71** | **5280** |
| **State Control Area Hydro** | **6581** | **2695** | **2506** | **64** | **2656** |
| **Total Regional Hydro** | **18815** | **12491** | **4697** | **190.44** | **7935** |

**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 |
|---|---|---|---|---|---|---|---|
| | MW | MW | Import | Export | Import | Export | MU |
| Vindhychal(HVDC B/B) | -50 | 50 | 250 | 150 | 2.12 | 0.46 | 1.66 |
| 765 KV Gwalior-Agra (D/C) | 1840 | 3138 | 3808 | 0 | 55.75 | 0.00 | 55.75 |
| 400 KV Zerda-Kankroli | -121 | -74 | 0 | 247 | 0.00 | 3.27 | -3.27 |
| 400 KV Zerda-Bhinmal | -117 | -63 | 0 | 295 | 0.00 | 2.97 | -2.97 |
| 220 KV Auraiya-Malanpur | -168 | -180 | 0 | 12 | 0.00 | 3.36 | -3.36 |
| 220 KV Badod-Kota/Morak | -8 | 10 | 19 | 86 | -0.96 | 0.96 | -1.91 |
| Mundra-Mohindergarh(HVDC Bipole) | 2500 | 2502 | 2505 | 0 | 60.42 | 0.00 | 60.42 |
| 400 KV Vindhyachal - Rihand | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 765 kV Phagi-Gwalior (D/C) | 1020 | 1156 | 1156 | 0 | 23.54 | 0.00 | 23.54 |
| **Sub Total WR** | **4896** | **6539** | | | **140.87** | **11.01** | **129.86** |
| Pusauli Bypass/HVDC | 400 | 300 | 400 | 0 | 7.72 | 0.00 | 7.72 |
| 400 KV MZP- GKP (D/C) | 8 | 276 | 388 | 0 | 5.30 | 0.00 | 5.30 |
| 400 KV Patna-Balia(D/C) X 2 | 226 | 242 | 289 | 0 | 6.18 | 0.00 | 6.18 |
| 400 KV B'Sharif-Balia (D/C) | 4 | 79 | 127 | 0 | 1.45 | 0.00 | 1.45 |
| 765 KV Gaya-Balia | 65 | 109 | 134 | 0 | 1.08 | 0.00 | 1.08 |
| 765 KV Gaya-Fatehpur | 174 | 133 | 200 | 73 | 1.87 | 0.00 | 1.87 |
| 220 KV Pusauli-Sahupuri | 181 | 119 | 183 | 0 | 3.53 | 0.00 | 3.53 |
| 132 KV K'nasa-Sahupuri | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 132 KV Son Ngr-Rihand | -26 | -26 | 0 | 30 | 0.00 | 0.60 | -0.60 |
| 132 KV Garhwa-Rihand | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 765 KV Sasaram - Fatehpur | -232 | -25 | 50 | 234 | 0.00 | 1.76 | -1.76 |
| 400 KV Barh -GKP (D/C) | 141 | 235 | 290 | 0 | 5.04 | 0.00 | 5.04 |
| **Sub Total ER** | **941** | **1442** | | | **32.16** | **2.36** | **29.80** |
| +/- 800 KV BiswanathCharialli-Agra | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| **Sub Total NER** | **0** | **0** | | | **0.00** | **0.00** | **0.00** |
| **Total IR Exch** | **5837** | **7981** | | | **173.03** | **13.37** | **159.66** |

**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 |
| 30.33 | 2.44 | 32.77 | 3.12 | 0.66 | 7.01 | 16.08 | 1.32 | -1.32 |

| 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 |
| 44.22 | 115.16 | 159.37 | 29.80 | 129.86 | 159.66 | -14.42 | 14.70 | 0.28 |

**V(C). Inter National Exchange with Nepal [Import (+ve)/Export (-ve)] [Linkwise]**

| Element | Peak(20:00 Hrs) | Off Peak(03:00 Hrs) | Maximum Interchange (MW) | | Energy (MU) | | Net Energy |
|---|---|---|---|---|---|---|---|
| | MW | MW | Import | Export | Import | Export | MU |
| 132 KV Tanakpur - Mahendarnagar | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |

**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 | 1.68 | 13.94 | 56.65 | 69.86 | 11.71 | 4.21 | 0.31 | 0.00 |

| <---------- 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) |
| 50.25 | 18.01 | 49.75 | 18.12 | 49.98 | 0.059 | 0.075 | 50.21 | 49.91 |

**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 | 404 | 04:01 | 400 | 00:33 | 0.0 | 0.0 | 0.0 | 0.0 |
| Gorakhpur | 400 | 415 | 08:05 | 398 | 11:26 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bareilly | 400 | 410 | 02:00 | 391 | 18:39 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kanpur | 400 | 411 | 00:00 | 9999 | 00:00 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dadri | 400 | 416 | 01:52 | 400 | 18:35 | 0.0 | 0.0 | 0.0 | 0.0 |
| Ballabhgarh | 400 | 423 | 04:02 | 403 | 18:36 | 0.0 | 0.0 | 5.6 | 0.0 |
| Bawana | 400 | 419 | 01:59 | 400 | 18:39 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bassi | 400 | 423 | 04:02 | 401 | 18:42 | 0.0 | 0.0 | 0.6 | 0.0 |
| Hissar | 400 | 416 | 01:52 | 398 | 11:23 | 0.0 | 0.0 | 0.0 | 0.0 |
| Moga | 400 | 421 | 02:49 | 402 | 11:20 | 0.0 | 0.0 | 0.3 | 0.0 |
| Abdullapur | 400 | 423 | 01:52 | 400 | 18:39 | 0.0 | 0.0 | 5.2 | 0.0 |
| Nalagarh | 400 | 431 | 03:40 | 404 | 18:35 | 0.0 | 0.0 | 21.9 | 0.7 |
| Kishenpur | 400 | 429 | 02:45 | 402 | 18:51 | 0.0 | 0.0 | 18.6 | 0.0 |
| Wagoora | 400 | 417 | 03:40 | 382 | 18:51 | 0.0 | 10.8 | 0.0 | 0.0 |
| Amritsar | 400 | 425 | 03:40 | 400 | 11:40 | 0.0 | 0.0 | 16.1 | 0.0 |
| Kashipur | 400 | 416 | 01:58 | 407 | 18:37 | 0.0 | 0.0 | 0.0 | 0.0 |
| Hamirpur | 400 | 0 | 00:00 | 9999 | 00:00 | 0.0 | 0.0 | 0.0 | 0.0 |
| Rishikesh | 400 | 404 | 01:59 | 380 | 11:40 | 0.0 | 15.7 | 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 | 774 | 08:06 | 741 | 18:38 | 0.0 | 0.1 | 0.0 | 0.0 |
| Balia | 765 | 767 | 08:05 | 738 | 22:20 | 0.0 | 3.4 | 0.0 | 0.0 |
| Moga | 765 | 800 | 04:02 | 766 | 11:24 | 0.0 | 0.0 | 0.0 | 0.0 |
| Agra | 765 | 787 | 04:02 | 752 | 18:42 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bhiwani | 765 | 796 | 01:53 | 758 | 11:40 | 0.0 | 0.0 | 0.0 | 0.0 |
| Unnao | 765 | 755 | 08:03 | 730 | 18:35 | 0.0 | 49.6 | 0.0 | 0.0 |
| Lucknow | 765 | 767 | 08:05 | 739 | 18:38 | 0.0 | 2.0 | 0.0 | 0.0 |
| Meerut | 765 | 803 | 01:58 | 769 | 18:41 | 0.0 | 0.0 | 5.1 | 0.0 |
| Jhatikara | 765 | 0 | 00:00 | 9999 | 00:00 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bareilly | 765 | 0 | 00:00 | 9999 | 00:00 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anta | 765 | 768 | 00:00 | 768 | 00:00 | 0.0 | 0.0 | 0.0 | 0.0 |
| Phagi | 765 | 787 | 03:59 | 756 | 10:50 | 0.0 | 0.0 | 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 | 510.69 | 1575.10 | 509.26 | 1515.08 | 413.23 | 512.39 |
| Pong | 426.72 | 384.05 | 420.24 | 902.94 | 415.93 | 718.14 | 89.57 | 379.45 |
| Tehri | 829.79 | 740.04 | 820.75 | 1017.27 | 818.40 | 972.25 | 106.84 | 263.00 |
| Koteshwar | 612.50 | 598.50 | 610.94 | 4.95 | 609.05 | 4.21 | 262.00 | 259.56 |
| Chamera-I | 760.00 | 748.75 | 755.96 | 0.00 | 0.00 | 0.00 | 115.44 | 135.68 |
| 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 | 513.55 | 4.02 | 512.18 | 5.16 | 128.37 | 154.41 |

*** 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 | -90 | 122 | 0 | -95 | 171 | 0 | -1.95 | 4.26 | 2.31 |
| Delhi | -94 | 382 | -2 | 5 | 345 | -2 | -1.27 | 10.89 | 9.62 |
| Haryana | 39 | 236 | 0 | 39 | 226 | 0 | 0.94 | 5.54 | 6.49 |
| HP | -50 | 186 | 0 | -50 | -495 | 0 | -1.20 | -1.68 | -2.88 |
| J&K | -39 | 0 | 0 | -39 | 35 | 0 | -0.55 | 0.97 | 0.42 |
| CHD | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.33 | 0.33 |
| Rajasthan | -5 | 324 | 2 | -5 | 193 | 2 | -0.12 | 4.33 | 4.20 |
| UP | 264 | 146 | 0 | 282 | 0 | 0 | 6.59 | 3.71 | 10.30 |
| Uttarakhand | 148 | 61 | 0 | 148 | 75 | 0 | 3.56 | 1.26 | 4.82 |
| **Total** | **173** | **1457** | **0** | **286** | **550** | **0** | **6.00** | **29.62** | **35.61** |

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

| State | Bilateral (MW) | | IEX (MW) | | PXIL (MW) | |
|---|---|---|---|---|---|---|
| | Maximum | Minimum | Maximum | Minimum | Maximum | Minimum |
| Punjab | -70 | -95 | 246 | 110 | 0 | 0 |
| Delhi | 35 | -94 | 765 | 101 | 0 | -2 |
| Haryana | 39 | 39 | 240 | 212 | 0 | 0 |
| HP | -50 | -50 | 206 | -554 | 0 | 0 |
| J&K | 11 | -39 | 185 | -115 | 0 | 0 |
| CHD | 0 | 0 | 50 | 0 | 0 | 0 |
| Rajasthan | -5 | -5 | 576 | -371 | 2 | 2 |
| UP | 312 | 205 | 495 | 0 | 0 | 0 |
| Uttarakhand | 148 | 148 | 205 | -111 | 0 | 0 |

**XI. System Constraints:**

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

**XIII. Weather Conditions For 10.10.2015 :**
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 :**

**Report for : 10.10.2015**

**पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**