

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(सर्वरक्षित की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GO1188682

Power Supply Position in Northern Region for 18.03.2016

Date of Reporting : 19.03.2016



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 |
| 34094 | 2014 | 36108 | 50.09 | 30272 | 451 | 30722 | 49.89 | 794.6 | 40.46 |

* 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) | UI [OD:(+ve), UD: (-ve)] Shortages * |
|--------------|--|--------------|---------------------|---------------|-----------------------------|---------------------------|----------------|-------------------------|---|
| | Thermal | Hydro | Renewable/others \$ | Total | | | | | |
| Punjab | 22.28 | 3.99 | | 26.27 | 58.14 | 57.12 | -1.02 | 83.38 | 0.00 |
| Haryana | 27.21 | 0.34 | | 27.55 | 76.17 | 75.60 | -0.57 | 103.15 | 0.00 |
| Rajasthan | 119.71 | 3.98 | 11.00 | 134.69 | 61.19 | 62.14 | 0.95 | 196.83 | 0.00 |
| Delhi | 10.75 | | | 10.75 | 52.27 | 53.98 | 1.71 | 64.73 | 0.29 |
| UP | 124.12 | 4.59 | | 128.71 | 113.44 | 113.41 | -0.03 | 242.12 | 30.08 |
| Uttarakhand | 9.37 | | | 9.37 | 23.06 | 24.95 | 1.89 | 34.32 | 0.15 |
| HP | 7.79 | | | 7.79 | 16.76 | 16.76 | 0.00 | 24.55 | 0.00 |
| J & K | 10.73 | | 0.00 | 10.73 | 32.06 | 31.39 | -0.67 | 42.12 | 9.94 |
| Chandigarh | | | | 0.00 | 3.45 | 3.35 | 0.27 | 3.35 | 0.00 |
| Total | 304.06 | 40.80 | 11.00 | 355.86 | 436.55 | 438.70 | 2.53 | 794.55 | 40.46 |

* 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 (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 | 3692 | 0 | 51 | -707 | 2688 | 0 | -21 | 175 | 3954 |
| Haryana | 5451 | 0 | 33 | -281 | 2973 | 0 | -29 | 10 | 5451 |
| Rajasthan | 7421 | 0 | -280 | 424 | 8224 | 0 | 14 | 553 | 8972 |
| Delhi | 3080 | 0 | -61 | -529 | 1861 | 0 | 140 | -894 | 3372 |
| UP | 9731 | 1535 | -210 | 448 | 11011 | 190 | 123 | 334 | 11523 |
| Uttarakhand | 1611 | 0 | 51 | 364 | 1181 | 0 | 34 | 272 | 1715 |
| HP | 1017 | 0 | -43 | -56 | 763 | 0 | 29 | 211 | 1339 |
| J&K | 1914 | 479 | 69 | 363 | 1477 | 261 | -130 | 390 | 1953 |
| Chandigarh | 177 | 0 | -6 | -10 | 93 | 0 | 13 | -10 | 183 |
| Total | 34094 | 2014 | -396 | 15 | 30272 | 451 | 173 | 1042 | 36834 |

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

Diversity is 1.04

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 | 1890 | 1852 | 1971 | 44.55 | 1856 | 44.46 | 0.10 |
| | Rihand I STPS (2*500) | 1000 | 831 | 911 | 865 | 18.87 | 786 | 18.70 | 0.17 |
| | Rihand II STPS (2*500) | 1000 | 948 | 1016 | 980 | 21.67 | 903 | 21.41 | 0.26 |
| | Rihand III STPS (2*500) | 1000 | 948 | 999 | 1013 | 21.83 | 910 | 21.84 | -0.01 |
| | Dadri I STPS (4*210) | 840 | 815 | 372 | 321 | 7.83 | 326 | 8.06 | -0.23 |
| | Dadri II STPS (2*490) | 980 | 980 | 921 | 679 | 17.43 | 726 | 18.17 | -0.73 |
| | Unchahar I TPS (2*210) | 420 | 350 | 380 | 385 | 8.00 | 333 | 8.08 | -0.08 |
| | Unchahar II TPS (2*210) | 420 | 404 | 440 | 427 | 8.72 | 363 | 8.55 | 0.17 |
| | Unchahar III TPS (1*210) | 210 | 202 | 221 | 190 | 4.25 | 177 | 4.34 | -0.09 |
| | ISTPP (Jhajhri) (3*500) | 1500 | 950 | 482 | 317 | 7.90 | 329 | 8.18 | -0.29 |
| | Dadri GPS (4*130.19+2*154.51) | 830 | 600 | 29 | 0 | 0.39 | 16 | 0.39 | 0.01 |
| | Anta GPS (3*88.71+1*153.2) | 419 | 415 | 0 | 0 | 0.00 | 0 | 0.00 | 0.00 |
| | Auraiya GPS (4*111.19+2*109.30) | 663 | 494 | 0 | 0 | 0.00 | 0 | 0.00 | 0.00 |
| | Dadri Solar(5) | 5 | 1 | 0 | 0 | 0.02 | 1 | 0.02 | 0.00 |
| | Unchahar Solar(10) | 10 | 1 | 0 | 0 | 0.03 | 1 | 0.03 | 0.00 |
| Singrauli Solar(15) | 15 | 3 | 0 | 0 | 0.06 | 3 | 0.07 | -0.01 | |
| KHEP(4*200) | 800 | 655 | 651 | 0 | 2.88 | 120 | 2.70 | 0.18 | |
| Sub Total (A) | 12112 | 10487 | 8274 | 7148 | 164 | 6851 | 165 | -1 | |
| B. NPC | NAPS (2*220) | 440 | 408 | 432 | 443 | 9.60 | 400 | 9.79 | -0.19 |
| | RAPS- B (2*220) | 440 | 384 | 420 | 420 | 9.03 | 376 | 9.22 | -0.19 |
| | RAPS- C (2*220) | 440 | 418 | 445 | 448 | 9.64 | 401 | 10.03 | -0.40 |
| | Sub Total (B) | 1320 | 1210 | 1297 | 1311 | 28.26 | 1178 | 29.04 | -0.78 |
| C. NHPC | Chamera I HPS (3*180) | 540 | 534 | 537 | 0 | 3.56 | 148 | 3.36 | 0.20 |
| | Chamera II HPS (3*100) | 300 | 300 | 308 | 0 | 2.23 | 93 | 2.11 | 0.12 |
| | Chamera III HPS (3*77) | 231 | 235 | 230 | 0 | 1.27 | 53 | 1.17 | 0.10 |
| | Bairasuli HPS(3*60) | 180 | 182 | 188 | 125 | 4.20 | 175 | 4.06 | 0.14 |
| | Salal-HPS (6*115) | 690 | 497 | 552 | 515 | 12.67 | 528 | 11.77 | 0.91 |
| | Tanakpur-HPS (3*40) | 94 | 16 | 23 | 15 | 0.44 | 18 | 0.37 | 0.07 |
| | Uri-I HPS (4*120) | 480 | 427 | 467 | 239 | 10.74 | 448 | 10.50 | 0.24 |
| | Uri-II HPS (4*60) | 240 | 218 | 231 | 229 | 5.29 | 220 | 5.24 | 0.05 |
| | Dhauliganga-HPS (4*70) | 280 | 210 | 213 | 0 | 0.73 | 30 | 0.65 | 0.08 |
| | Dulhasi-HPS (3*130) | 390 | 387 | 131 | 0 | 2.87 | 120 | 2.54 | 0.34 |
| | Sewa-II HPS (3*40) | 120 | 119 | 126 | 125 | 2.99 | 125 | 2.86 | 0.14 |
| | Parbati 3 (4*130) | 520 | 138 | 260 | 0 | 0.88 | 37 | 0.83 | 0.05 |
| Sub Total (C) | 4065 | 3262 | 3265 | 1247 | 48 | 1995 | 45 | 2 | |
| D.SJVNL | NJPC (6*250) | 1500 | 1350 | 1267 | 0 | 6.93 | 289 | 7.04 | -0.11 |
| | Rampur HEP (6*68.67) | 412 | 442 | 373 | 0 | 1.95 | 81 | 1.97 | -0.01 |
| | Sub Total (D) | 1912 | 1792 | 1640 | 0 | 8.88 | 370 | 9.01 | -0.12 |
| E. THDC | Tehri HPS (4*250) | 1000 | 495 | 494 | 0 | 6.58 | 274 | 6.50 | 0.08 |
| | Koteswar HPS (4*100) | 400 | 128 | 97 | 91 | 3.11 | 130 | 3.06 | 0.05 |
| | Sub Total (E) | 1400 | 623 | 591 | 91 | 9.69 | 404 | 9.56 | 0.13 |
| F. BBMB | Bhakra HPS (2*108+3*126+5*157) | 1379 | 431 | 755 | 348 | 10.02 | 418 | 10.35 | -0.33 |
| | Dehar HPS (6*165) | 990 | 325 | 495 | 0 | 7.95 | 331 | 7.80 | 0.15 |
| | Pong HPS (6*66) | 396 | 113 | 220 | 55 | 2.70 | 113 | 2.72 | -0.02 |
| | Sub Total (F) | 2765 | 870 | 1470 | 403 | 20.68 | 862 | 20.87 | -0.20 |
| G. IPP(s)/JV(s) | ALLAIN DUHANGAN HPS(IPP) (2*96) | 192 | 0 | 105 | 0 | 0.41 | 17 | 0.41 | 0.00 |
| | KARCHAM WANGTOO HPS(IPP) (4*250) | 1000 | 0 | 625 | 0 | 3.38 | 141 | 3.84 | -0.46 |
| | Malana Stg-II HPS (2*50) | 100 | 0 | 0 | 0 | 0.21 | 9 | 0.20 | 0.01 |
| | Shree Cement TPS (2*150) | 300 | 0 | 297 | 296 | 7.07 | 295 | 7.11 | -0.04 |
| | Budhil HPS(IPP) (2*35) | 70 | 0 | 0 | 0 | 0.29 | 12 | 0.26 | 0.02 |
| Sub Total (G) | 1662 | 0 | 1027 | 296 | 11.35 | 473 | 11.81 | -0.46 | |
| H. Total Regional Entities (A-G) | 25237 | 18243 | 17564 | 10496 | 291.18 | 12133 | 290.75 | 0.44 | |

| 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 | 160 | 160 | 3.50 | 146 |
| | Guru Nanak Dev TPS(Bhatinda) (2*110+2*120) | 460 | 0 | 0 | -0.03 | -1 |
| | Guru Hargobind Singh TPS(L.mbt) (2*210+2*250) | 920 | 0 | 0 | -0.08 | -4 |
| | Goindwal(GVK) | | 0 | 0 | 0.90 | 38 |
| | Rajpura (2*700) | 1400 | 860 | 660 | 18.13 | 755 |
| | Talwandi Saboo (2*660) | 1320 | 0 | 0 | -0.15 | -6 |
| | Thermal (Total) | 5360 | 1020 | 820 | 22.28 | 928 |
| | Total Hydro | 1000 | 178 | 128 | 3.99 | 166 |
| | Total Punjab | 6360 | 1198 | 948 | 26.27 | 1094 |
| | Haryana | Panipat TPS (4*110+2*210+2*250) | 1367 | 0 | 0 | 0.00 |
| DCRTPP (Yamuna nagar) (2*300) | | 600 | 551 | 464 | 11.78 | 491 |
| Faridabad GPS (NTPC) | | 432 | 195 | 160 | 4.43 | 185 |
| RGTPP (khedar) (IPP) (2*600) | | 1200 | 572 | 392 | 11.00 | 458 |
| Magnum Diesel (IPP) | | 25 | 0 | 0 | 0.00 | 0 |
| Jhajjar(CLP) (2*660) | | 1320 | 0 | 0 | 0.00 | 0 |
| Thermal (Total) | | 4944 | 1318 | 1016 | 27.21 | 1134 |
| Total Hydro | | 62 | 10 | 16 | 0.34 | 14 |
| Total Haryana | | 5006 | 1328 | 1032 | 27.55 | 1148 |
| Rajasthan | | kota TPS (2*110+2*195+3*210) | 1240 | 715 | 683 | 17.05 |
| | suratgarh TPS (6*250) | 1500 | 411 | 452 | 9.47 | 394 |
| | Chabra TPS (4*250) | 1000 | 578 | 635 | 16.20 | 675 |
| | 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 | 220 | 207 | 5.46 | 228 |
| | RAPS A (NPC) (1*100+1*200) | 300 | 0 | 0 | 0.00 | 0 |
| | Barsingar (NLC) (2*125) | 250 | 95 | 95 | 2.12 | 88 |
| | Giral LTPS (2*125) | 250 | 0 | 0 | 0.00 | 0 |
| | Rajwast LTPS (IPP) (8*135) | 1080 | 773 | 845 | 20.01 | 834 |
| | VS LIGNITE LTPS (IPP) (1*135) | 135 | 0 | 0 | 0.00 | 0 |
| | Kalsindh Thermal(2*600) | 1200 | 848 | 1053 | 22.13 | 922 |
| | Kawail(Adani) (2*660) | 1320 | 963 | 1167 | 27.27 | 1136 |
| | Thermal (Total) | 8876 | 4603 | 5137 | 120 | 4988 |
| | Total Hydro | 550 | 147 | 160 | 3.98 | 166 |
| | Wind power | 3214 | 421 | 331 | 7.74 | 322 |
| | Biomass | 99 | 17 | 17 | 0.40 | 17 |
| | Solar | 730 | 0 | 0 | 2.86 | 119 |
| | Renewable/Others (Total) | 4043 | 438 | 348 | 11.00 | 458 |
| | Total Rajasthan | 13469 | 5188 | 5645 | 134.69 | 5612 |
| UP | Anpara TPS (3*210+2*500) | 1630 | 0 | 1219 | 19.25 | 802 |
| | Obra TPS (2*50+2*94+5*200) | 1194 | 390 | 309 | 7.50 | 313 |
| | Paricha TPS (2*110+2*220+2*250) | 1140 | 759 | 791 | 18.10 | 754 |
| | Panki TPS (2*105) | 210 | 0 | 0 | 0.00 | 0 |
| | Harduaganj TPS (1*60+1*105+2*250) | 665 | 319 | 316 | 7.40 | 308 |
| | Tanda TPS (NTPC) (4*110) | 440 | 386 | 400 | 8.70 | 363 |
| | Roza TPS (IPP) (4*300) | 1200 | 770 | 549 | 14.60 | 608 |
| | Anpara-C (IPP) (2*600) | 1200 | 1080 | 1080 | 26.04 | 1085 |
| | Bajaj Energy Pvt.Ltd(IPP) TPS (10*45) | 450 | 0 | 0 | 0.00 | 0 |
| | Anpara-D(2*500) | 500 | 328 | 192 | 5.72 | 239 |
| | Lalitpur TPS(2*660) | 1320 | 0 | 0 | 0.00 | 0 |
| | Bara(2*660) | 1320 | 0 | 0 | 0.00 | 0 |
| | Thermal (Total) | 11269 | 4032 | 4856 | 107 | 4472 |
| | Vishnuparyag HPS (IPP)(4*110) | 440 | 66 | 64 | 1.57 | 65 |
| | Alakananda(4*82.5) | 330 | 0 | 63 | 0.92 | 38 |
| | Other Hydro | 527 | 233 | 101 | 2.11 | 88 |
| | Cogeneration | 981 | 700 | 700 | 16.80 | 700 |
| | Total UP | 13547 | 5031 | 5784 | 129 | 5363 |
| | Uttarakhand | Total Hydro | 1398 | 472 | 319 | 9.37 |
| Total Uttarakhand | | 1398 | 472 | 319 | 9.37 | 391 |
| Delhi | Rajghat TPS (2*67.5) | 135 | 0 | 0 | -0.02 | -1 |
| | Delhi Gas Turbine (6x30 + 3x34) | 282 | 40 | 42 | 0.88 | 37 |
| | Pragati Gas Turbine (2x104+ 1x122) | 330 | 0 | 0 | -0.01 | 0 |
| | Rithala GPS (3*36) | 95 | 0 | 0 | 0.00 | 0 |
| | Bawana GPS (4*216+2*253) | 1370 | 253 | 252 | 6.07 | 253 |
| | Badarpur TPS (NTPC) (3*95+2*210) | 705 | 165 | 165 | 3.82 | 159 |
| | Thermal (Total) | 2917 | 458 | 459 | 10.75 | 448 |
| | Total Delhi | 2917 | 458 | 459 | 10.75 | 448 |
| HP | Baspa HPS (IPP) (3*100) | 300 | 29 | 0 | 0.87 | 36 |
| | Malana HPS (IPP) (2*43) | 86 | 0 | 0 | 0.27 | 11 |
| | Other Hydro | 878 | 292 | 216 | 6.65 | 277 |
| | Total HP | 1264 | 321 | 216 | 7.79 | 325 |
| J & K | Baqilhar HPS (IPP) (3*150) | 450 | 350 | 249 | 7.67 | 320 |
| | Other Hydro/IPP | 560 | 160 | 79 | 3.06 | 127 |
| | Gas/Diesel/Others | 190 | 0 | 0 | 0.00 | 0 |
| | Total J & K | 1200 | 510 | 328 | 10.73 | 447 |
| Total State Control Area Generation | | 45161 | 14506 | 14731 | 355.86 | 14827 |
| J. Net Inter Regional Exchange (Import +ve)Export (-ve) | | | 5594 | 6826 | 161.92 | 6747 |
| Total Regional Availability(Gross) | | 70398 | 37664 | 32053 | 808.96 | 33707 |

IV. Total Hydro Generation:

| | | | | | |
|-----------------------------|--------------|--------------|-------------|---------------|-------------|
| Regional Entities Hydro | 12234 | 8347 | 1740 | 94.01 | 3917 |
| State Control Area Hydro | 6581 | 1937 | 1395 | 41 | 1700 |
| Total Regional Hydro | 18815 | 10284 | 3135 | 134.81 | 5617 |

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

| Element | Peak(19:00 Hrs) | Off Peak(03:00 Hrs) | Maximum Interchange (MW) | | Energy (MU) | | Net Energy MU |
|------------------------------------|-----------------|---------------------|--------------------------|------------|---------------|--------------|---------------|
| | MW | MW | Import | Export | Import | Export | |
| Vindhychal(HVDC B/B) | -250 | 150 | 250 | 250 | 2.19 | 1.96 | 0.23 |
| 765 KV Gwalior-Agra (D/C) | 3059 | 2920 | 3443 | 0 | 71.99 | 0.00 | 71.99 |
| 400 KV Zarda-Kankroli | -21 | -201 | 6 | 230 | 0.00 | 2.83 | -2.83 |
| 400 KV Zarda-Bhimmal | 13 | -144 | 38 | 211 | 0.00 | 1.40 | -1.40 |
| 220 KV Auraiya-Malanpur | -7 | -21 | 0 | 50 | 0.00 | 0.16 | -0.16 |
| 220 KV Badod-Kota/Morak | 20 | 17 | 87 | 0 | 0.88 | 0.00 | 0.88 |
| Mundra-Mohinderghar(HVDC Bipole) | 1251 | 2503 | 2508 | 0 | 55.29 | 0.00 | 55.29 |
| 400 KV Vindhyachal - Rihand | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 765 kv Phagi-Gwalior (D/C) | 877 | 696 | 1057 | 0 | 21.09 | 0.00 | 21.09 |
| Sub Total WR | 4942 | 5920 | 5920 | 0 | 151.44 | 6.35 | 145.09 |
| Pusaali Bypass/HVDC | 400 | 400 | 400 | 0 | 8.95 | 0.00 | 8.95 |
| 400 KV MZP- GKP (D/C) | 508 | 152 | 27 | 596 | 0.00 | 5.41 | -5.41 |
| 400 KV Patna-Balia(D/C) X 2 | 331 | 418 | 785 | 0 | 11.53 | 0.00 | 11.53 |
| 400 KV B Sharif-Balia (D/C) | -235 | -93 | 0 | 240 | 0.00 | 2.32 | -2.32 |
| 765 KV Gaya-Balia | 92 | 148 | 391 | 0 | 2.12 | 0.00 | 2.12 |
| 765 KV Gaya-Varanasi -1 | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 220 KV Pusaali-Sahupuri | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 132 KV Khasa-Sahupuri | 0 | 0 | 0 | 0 | 0.96 | 0.00 | 0.96 |
| 132 KV Son Ngr-Rihand | -30 | -30 | 0 | 30 | 0.00 | 0.56 | -0.56 |
| 132 KV Garhwa-Rihand | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 765 KV Sasaram - Fatehpur | -318 | -97 | 139 | 318 | 0.00 | 1.10 | -1.10 |
| 400 KV Barh -GKP (D/C) | 404 | 508 | 536 | 0 | 11.06 | 0.00 | 11.06 |
| Sub Total ER | 1152 | 1406 | 1406 | 0 | 34.62 | 9.38 | 25.23 |
| +/- 800 KV BiswanathCharialli-Agra | -500 | -500 | 150 | 500 | 0.00 | 8.40 | -8.40 |
| Sub Total NER | -500 | -500 | 150 | 500 | 0.00 | 8.40 | -8.40 |
| Total IR Exch | 5594 | 6826 | 6826 | 0 | 186.05 | 24.13 | 161.92 |

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 |
| 29.84 | 0.39 | 30.23 | -1.78 | -8.08 | 0.03 | 24.21 | 0.00 | 0.00 |

| Total IR Schedule (MU) | | | Total IR Actual (MU) | | | Net IR UI (MU) | | |
|------------------------|-------------------------|--------|---------------------------|------------|--------|---------------------------|------------|-------|
| Through ER | Through WR Inclds Mndra | Total | Through ER(Including NER) | Through WR | Total | Through ER(Including NER) | Through WR | Total |
| 28.48 | 138.76 | 167.24 | 16.83 | 145.09 | 161.92 | -11.65 | 6.32 | -5.33 |

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

| Element | Peak(19:00 Hrs) | Off Peak(03:00 Hrs) | Maximum Interchange (MW) | | Energy (MU) | | Net Energy MU |
|-------------------------------|-----------------|---------------------|--------------------------|--------|-------------|--------|---------------|
| | MW | MW | Import | Export | Import | Export | |
| 132 KV Tanakpur - Mahendnagar | -23 | -29 | 0 | 32 | 0 | 1 | -0.69 |

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 | 0.09 | 2.29 | 12.06 | 49.33 | 67.43 | 16.59 | 3.97 | 0.05 | 0.00 |

| Frequency (Hz) | | | | Average Frequency | Frequency Variation Index | Std. Dev. | Frequency in 15 Min Block | | Freq Dev Index (% of Time) |
|----------------|-------|---------|-------|-------------------|---------------------------|-----------|---------------------------|-------|----------------------------|
| Maximum | | Minimum | | | | | MAX | MIN | |
| Freq | Time | Freq | Time | Hz | (Hz) | (Hz) | (Hz) | | |
| 50.21 | 18.02 | 49.68 | 14.33 | 49.99 | 0.059 | 0.076 | 50.17 | 49.84 | 32.57 |

VII. Voltage profile 400 kV

| Station | Voltage Level (kV) | Maximum | | Minimum | | Voltage (in % of Time) | | | | Voltage Deviation Index (% of Time) |
|-------------------|--------------------|-------------|-------|--------------|-------|------------------------|---------|---------|---------|-------------------------------------|
| | | Voltage(KV) | Time | Voltage (KV) | Time | <380 kV | <390 kV | >420 kV | >430 kV | |
| Rihand | 400 | 408 | 18:00 | 398 | 12:50 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Gorakhpur | 400 | 422 | 16:04 | 405 | 18:44 | 0.0 | 0.0 | 0.5 | 0.0 | 0.5 |
| Bareilly(PG)400kV | 400 | 421 | 18:01 | 403 | 09:13 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 |
| Kanpur | 400 | 420 | 18:01 | 404 | 12:17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dadri | 400 | 425 | 01:59 | 406 | 12:22 | 0.0 | 0.0 | 19.2 | 0.0 | 19.2 |
| Balabgarh | 400 | 432 | 02:00 | 411 | 12:17 | 0.0 | 0.0 | 54.3 | 1.2 | 54.3 |
| Bawana | 400 | 430 | 02:01 | 410 | 12:19 | 0.0 | 0.0 | 46.0 | 0.0 | 46.0 |
| Bassi | 400 | 426 | 17:59 | 401 | 22:34 | 0.0 | 0.0 | 4.5 | 0.0 | 4.5 |
| Hissar | 400 | 425 | 01:58 | 407 | 12:17 | 0.0 | 0.0 | 19.2 | 0.0 | 19.2 |
| Moga | 400 | 424 | 02:02 | 407 | 18:55 | 0.0 | 0.0 | 13.8 | 0.0 | 13.8 |
| Abdullapur | 400 | 430 | 02:00 | 407 | 18:47 | 0.0 | 0.0 | 50.7 | 0.0 | 50.7 |
| Nalagarh | 400 | 437 | 02:01 | 415 | 18:46 | 0.0 | 0.0 | 91.8 | 28.7 | 91.8 |
| Kishenpur | 400 | 423 | 02:00 | 402 | 18:44 | 0.0 | 0.0 | 11.5 | 0.0 | 11.5 |
| Wagoora | 400 | 398 | 04:03 | 374 | 18:54 | 13.5 | 67.4 | 0.0 | 0.0 | 13.5 |
| Amritsar | 400 | 429 | 02:00 | 413 | 06:41 | 0.0 | 0.0 | 70.2 | 0.0 | 70.2 |
| Kashipur | 400 | 0 | 00:00 | 0 | 00:00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Hamirpur | 400 | 425 | 05:25 | 412 | 19:17 | 0.0 | 0.0 | 23.6 | 0.0 | 23.6 |
| Rishikesh | 400 | 0 | 00:00 | 0 | 00:00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

VIII. Voltage profile 765 kV

| Station | Voltage Level (kV) | Maximum | | Minimum | | Voltage (in % of Time) | | | | Voltage Deviation Index (% of Time) |
|-----------------|--------------------|-------------|-------|--------------|-------|------------------------|---------|---------|---------|-------------------------------------|
| | | Voltage(KV) | Time | Voltage (KV) | Time | <728 kV | <742 kV | >800 kV | >820 kV | |
| Fatehpur | 765 | 772 | 18:01 | 741 | 09:22 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 |
| Balia | 765 | 778 | 16:01 | 753 | 18:47 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Moga | 765 | 806 | 18:00 | 775 | 06:42 | 0.0 | 0.0 | 6.0 | 0.0 | 6.0 |
| Agra | 765 | 792 | 18:02 | 759 | 09:17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bhiwani | 765 | 808 | 04:03 | 777 | 12:17 | 0.0 | 0.0 | 17.1 | 0.0 | 17.1 |
| Unnao | 765 | 782 | 16:02 | 751 | 18:52 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Lucknow | 765 | 0 | 00:00 | 0 | 00:00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Meerut | 765 | 816 | 02:04 | 773 | 09:22 | 0.0 | 0.0 | 38.2 | 0.0 | 38.2 |
| Jhatikara | 765 | 810 | 01:59 | 774 | 12:22 | 0.0 | 0.0 | 18.2 | 0.0 | 18.2 |
| Bareilly 765 kV | 765 | 788 | 02:01 | 761 | 09:11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anta | 765 | 784 | 17:58 | 761 | 07:32 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Phagi | 765 | 797 | 18:00 | 757 | 22:23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

IX. Reservoir Parameters:

| Name of Reservoir | Parameters | | Present Parameters | | Last Year | | Last day | |
|-------------------|------------|----------|--------------------|-------------|-----------|-------------|----------------------------|---------------------------|
| | FRL (m) | MDDL (m) | Level (m) | Energy (MU) | Level (m) | Energy (MU) | Inflow (m ³ /s) | Usage (m ³ /s) |
| Bhakra | 513.59 | 445.62 | 482.25 | 511.55 | 481.00 | 481.64 | 184.94 | 333.32 |
| Pong | 426.72 | 384.05 | 397.01 | 162.91 | 401.94 | 266.33 | 58.42 | 204.99 |
| Tehri | 829.79 | 740.04 | 761.50 | 133.00 | 778.10 | 298.00 | 44.72 | 216.00 |
| Koteswar | 612.50 | 598.50 | 611.31 | 5.20 | 611.21 | 4.95 | 216.00 | 204.92 |
| Chamera-I | 760.00 | 748.75 | 754.15 | 0.00 | 0.00 | 0.00 | 209.11 | 98.28 |
| 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 | 497.70 | 0.00 | 507.09 | 3.07 | 77.43 | 0.00 |

* 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 | 5 | 170 | 0 | -811 | 104 | 0 | -2.68 | 5.01 | 2.33 |
| Delhi | -713 | -181 | 0 | -632 | 103 | 0 | -15.91 | 2.85 | -13.07 |
| Haryana | -167 | 177 | 0 | -522 | 241 | 0 | -7.86 | 5.63 | -2.23 |
| HP | 30 | 181 | 0 | 132 | -187 | 0 | 3.03 | 0.96 | 3.99 |
| J&K | 400 | -10 | 0 | 315 | 48 | 0 | 8.12 | -0.84 | 7.28 |
| CHD | 0 | -10 | 0 | 0 | -10 | 0 | 0.00 | -0.15 | -0.15 |
| Rajasthan | -11 | 565 | 0 | -7 | 431 | 0 | 0.56 | 11.75 | 12.31 |
| UP | 140 | 194 | 0 | 448 | 0 | 0 | 2.37 | 1.17 | 3.54 |
| Uttarakhand | 193 | 79 | 0 | 193 | 171 | 0 | 4.87 | 3.14 | 8.01 |
| Total | -122 | 1164 | 0 | -886 | 900 | 0 | -7.50 | 29.51 | 22.01 |

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

| State | Bilateral (MW) | | IEX (MW) | | PXIL (MW) | |
|-------------|----------------|---------|----------|---------|-----------|---------|
| | Maximum | Minimum | Maximum | Minimum | Maximum | Minimum |
| Punjab | 5 | -811 | 301 | -17 | 0 | 0 |
| Delhi | -624 | -784 | 496 | -235 | 0 | 0 |
| Haryana | -167 | -522 | 323 | 25 | 0 | 0 |
| HP | 242 | 30 | 254 | -625 | 0 | 0 |
| J&K | 400 | 311 | 59 | -246 | 0 | 0 |
| CHD | 0 | 0 | 0 | -30 | 0 | 0 |
| Rajasthan | 185 | -11 | 565 | 104 | 0 | 0 |
| UP | 448 | -71 | 194 | 0 | 0 | 0 |
| Uttarakhand | 222 | 193 | 296 | 9 | 0 | 0 |

XI. System Reliability Indices(Violation of TTC and ATC):

(i)%age of times N-1 Criteria was violated in the inter - regional corridors

| | |
|--------------|-------|
| WR | 9.38% |
| ER | 0.00% |
| Simultaneous | 3.47% |

(ii)%age of times ATC violated on the inter-regional corridors

| | |
|--------------|--------|
| WR | 20.14% |
| ER | 0.00% |
| Simultaneous | 14.58% |

(iii)%age of times Angular Difference on Important Buses was beyond permissible limits(40 deg.)

| | |
|----------------|-------|
| Rihand - Dadri | 0.00% |
|----------------|-------|

XII. System Constraints:

XIII. Grid Disturbance / Any Other Significant Event:

XIV. Weather Conditions For 18.03.2016 :

Normal

XV. Synchronisation of new generating units :

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

01) 3*80 MVAR B/R at G.Noida 1st time charged at 2042 hrs on date 18.03.2016 .
02) 1500 MVA ,765/400 KV, G. Noida ICT-II 1st time charged at 1438 hrs on date 18.03.2016 at no load .

XVII. Tripping of lines in pooling stations :

XVIII. Complete generation loss in a generating station :