# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड
(भारत सरकार का उद्यम)
## उत्तर क्षेत्रीय भार प्रेषण केंद्र
CIN: U40105DL2009GOI188682

**Power Supply Position in Northern Region for 22.10.2017**
**Date of Reporting : 23.10.2017**

**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 |
| 42060 | 1107 | 43167 | 50.04 | 35037 | 1457 | 36495 | 49.97 | 900.48 | 10.28 |

* 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 (Net MU) | Actual Drawal (Net MU) | UI (Net MU) | Consumption (Net MU) | Shortages * (MU) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thermal | Hydro | Gas/Naptha/ Diesal | Solar | Wind | Other (Biomass/ Small hydro/ Co-Generation etc.) | Total | | | | | |
| **Punjab** | 55.79 | 9.97 | 0.00 | 0.07 | 0.00 | 0.13 | 65.95 | 54.62 | 54.10 | -0.52 | 120.04 | 0.00 |
| **Haryana** | 31.42 | 0.62 | 4.13 | 0.00 | 0.00 | 0.00 | 36.17 | 85.45 | 86.74 | 1.28 | 122.91 | 0.00 |
| **Rajasthan** | 97.54 | 3.91 | 4.96 | 3.11 | 11.30 | 4.64 | 125.45 | 58.37 | 59.19 | 0.82 | 184.64 | 0.00 |
| **Delhi** | 0.00 | 0.00 | 13.53 | 0.00 | 0.00 | 0.00 | 13.53 | 59.46 | 57.97 | -1.49 | 71.49 | 0.01 |
| **UP** | 170.60 | 14.92 | 0.00 | 0.00 | 0.00 | 1.20 | 186.73 | 124.27 | 124.33 | 0.06 | 311.06 | 1.66 |
| **Uttarakhand** | 0.00 | 13.51 | 2.44 | 0.60 | 0.00 | 0.00 | 16.55 | 13.45 | 13.08 | -0.37 | 29.63 | 0.00 |
| **HP** | 0.00 | 6.90 | 0.00 | 0.00 | 0.00 | 3.16 | 10.06 | 10.38 | 11.08 | 0.69 | 21.14 | 0.00 |
| **J & K** | 0.00 | 8.04 | 0.00 | 0.00 | 0.00 | 0.00 | 8.04 | 30.94 | 28.44 | -2.49 | 36.48 | 8.62 |
| **Chandigarh** | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.91 | 3.10 | -0.81 | 3.10 | 0.00 |
| **Total** | **355.35** | **57.86** | **25.06** | **3.77** | **11.30** | **9.12** | **462.46** | **440.86** | **438.02** | **-2.83** | **900.48** | 10.28 |

* 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 | | | | Maximum Demand Met (MW) and Time(Hrs) | | Shortage (MW) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Demand Met | Shortage | UI | STOA/PX transaction | Demand Met | Shortage | UI | STOA/PX transaction | | | |
| **Punjab** | 5761 | 0 | -91 | -431 | 4292 | 0 | -158 | -475 | 5761 | 19 | 0 |
| **Haryana** | 6178 | 0 | 37 | 57 | 5153 | 0 | 233 | 52 | 6178 | 19 | 0 |
| **Rajasthan** | 7927 | 0 | 124 | 3 | 7208 | 0 | -151 | 0 | 9040 | 8 | 0 |
| **Delhi** | 3333 | 0 | -185 | -183 | 2774 | 0 | 68 | -371 | 3555 | 20 | 0 |
| **UP** | 14064 | 630 | -331 | -34 | 12423 | 1230 | 43 | -34 | 14337 | 20 | 0 |
| **Uttarakhand** | 1596 | 0 | -20 | -107 | 1092 | 0 | 61 | 6 | 1596 | 19 | 0 |
| **HP** | 1128 | 0 | 87 | -915 | 699 | 0 | 29 | -57 | 1128 | 19 | 0 |
| **J&K** | 1907 | 477 | -58 | 157 | 1289 | 227 | -143 | 414 | 1907 | 19 | 477 |
| **Chandigarh** | 167 | 0 | -97 | -81 | 107 | 0 | -24 | 0 | 167 | 19 | 0 |
| **Total** | **42060** | **1107** | **-533** | **-1534** | **35037** | **1457** | **-42** | **-464** | **42060** | **19** | **1107** |

* 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 :**

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 | 1731 | 1865 | 1488 | 38.93 | 1622 | 37.81 | 1.12 |
| | Rihand I STPS (2*500) | 1000 | 923 | 1004 | 999 | 21.70 | 904 | 21.89 | -0.20 |
| | Rihand II STPS (2*500) | 1000 | 943 | 1024 | 1020 | 22.82 | 951 | 22.35 | 0.47 |
| | Rihand III STPS (2*500) | 1000 | 943 | 991 | 1011 | 22.51 | 938 | 22.21 | 0.30 |
| | Dadri I STPS (4*210) | 840 | 653 | 534 | 335 | 8.26 | 344 | 8.55 | -0.28 |
| | Dadri II STPS (2*490) | 980 | 695 | 667 | 529 | 12.63 | 526 | 12.62 | 0.01 |
| | Unchahar I TPS (2*210) | 420 | 192 | 191 | 217 | 4.10 | 171 | 4.17 | -0.07 |
| | Unchahar II TPS (2*210) | 420 | 290 | 286 | 319 | 5.87 | 245 | 6.05 | -0.18 |
| | Unchahar III TPS (1*210) | 210 | 192 | 158 | 178 | 3.39 | 141 | 3.54 | -0.14 |
| | Unchahar IV TPS(1*500) | 500 | 450 | 457 | 490 | 9.03 | 376 | 8.73 | 0.30 |
| | ISTPP (Jhajjhar) (3*500) | 1500 | 730 | 747 | 706 | 14.60 | 608 | 14.85 | -0.25 |
| | Dadri GPS (4*130.19+2*154.51) | 830 | 802 | 150 | 173 | 3.61 | 150 | 3.93 | -0.32 |
| | Anta GPS (3*88.71+1*153.2) | 419 | 396 | 0 | 0 | 0.00 | 0 | 0.00 | 0.00 |
| | Auraiya GPS (4*111.19+2*109.30) | 663 | 566 | 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 | 2 | 0 | 0 | 0.04 | 2 | 0.05 | 0.00 |
| | Singrauli Solar(15) | 15 | 2 | 0 | 0 | 0.01 | 0 | 0.05 | -0.04 |
| | KHEP(4*200) | 800 | 792 | 865 | 159 | 4.96 | 207 | 4.50 | 0.46 |
| | **Sub Total (A)** | **12612** | **10302** | **8939** | **7624** | **172** | **7186** | **171** | **1.17** |
| **B. NPC** | NAPS (2*220) | 440 | 391 | 435 | 445 | 9.59 | 399 | 9.38 | 0.20 |
| | RAPS- B (2*220) | 440 | 440 | 433 | 436 | 9.41 | 392 | 10.56 | -1.15 |
| | RAPS- C (2*220) | 440 | 415 | 450 | 450 | 9.82 | 409 | 9.96 | -0.14 |
| | **Sub Total (B)** | **1320** | **1246** | **1318** | **1331** | **28.82** | **1201** | **29.90** | **-1.09** |
| **C. NHPC** | Chamera I HPS (3*180) | 540 | 534 | 537 | 0 | 2.74 | 114 | 2.60 | 0.14 |
| | Chamera II HPS (3*100) | 300 | 295 | 303 | 0 | 2.51 | 105 | 2.42 | 0.09 |
| | Chamera III HPS (3*77) | 231 | 70 | 230 | 0 | 1.73 | 72 | 1.67 | 0.06 |
| | Bairasuil HPS(3*60) | 180 | 178 | 124 | 0 | 0.74 | 31 | 0.65 | 0.09 |
| | Salal-HPS (6*115) | 690 | 187 | 408 | 150 | 5.10 | 213 | 4.49 | 0.62 |
| | Tanakpur-HPS (3*31.4) | 94 | 59 | 57 | 63 | 1.53 | 64 | 1.42 | 0.11 |
| | Uri-I HPS (4*120) | 480 | 70 | 210 | 24 | 1.92 | 80 | 1.68 | 0.24 |
| | Uri-II HPS (4*60) | 240 | 51 | 36 | 39 | 1.26 | 53 | 1.22 | 0.05 |
| | Dhauliganga-HPS (4*70) | 280 | 109 | 280 | 0 | 2.66 | 111 | 2.61 | 0.05 |
| | Dulhasti-HPS (3*130) | 390 | 387 | 397 | 0 | 6.75 | 281 | 6.50 | 0.25 |
| | Sewa-II HPS (3*40) | 120 | 119 | 97 | 0 | 0.32 | 13 | 0.36 | -0.04 |
| | Parbati 3 (4*130) | 520 | 45 | 393 | 0 | 1.00 | 42 | 0.96 | 0.04 |
| | **Sub Total (C )** | **4065** | **2102** | **3071** | **275** | **28** | **1177** | **27** | **1.69** |
| **D.SJVNL** | NJPC (6*250) | 1500 | 1482 | 1483 | 0 | 12.90 | 537 | 12.75 | 0.15 |
| | Rampur HEP (6*68.67) | 412 | 408 | 405 | 0 | 3.68 | 153 | 3.54 | 0.14 |
| | **Sub Total (D)** | **1912** | **1890** | **1888** | **0** | **16.58** | **691** | **16.30** | **0.29** |
| **E. THDC** | Tehri HPS (4*250) | 1000 | 988 | 905 | 0 | 7.04 | 293 | 6.90 | 0.14 |
| | Koteshwar HPS (4*100) | 400 | 91 | 103 | 91 | 0.22 | 9 | 2.19 | -1.97 |
| | **Sub Total (E)** | **1400** | **1079** | **1008** | **91** | **7.26** | **302** | **9.09** | **-1.83** |
| **F. BBMB** | Bhakra HPS (2*108+3*126+5*157) | 1379 | 510 | 1060 | 387 | 12.23 | 510 | 12.23 | 0.00 |
| | Dehar HPS (6*165) | 990 | 279 | 660 | 165 | 6.88 | 287 | 6.70 | 0.18 |
| | Pong HPS (6*66) | 396 | 262 | 330 | 132 | 6.43 | 268 | 6.29 | 0.14 |
| | **Sub Total (F)** | **2765** | **1051** | **2050** | **684** | **25.53** | **1064** | **25.22** | **0.32** |
| **G. IPP(s)/JV(s)** | Allain DuhanganHPS(IPP) (2*96) | 192 | 0 | 130 | 48 | 0.99 | 41 | 1.01 | -0.02 |
| | Karcham Wangtoo HPS(IPP) (4*250) | 1000 | 0 | 1000 | 165 | 6.96 | 290 | 6.94 | 0.01 |
| | Malana Stg-II HPS (2*50) | 100 | 0 | 16 | 15 | 0.62 | 26 | 0.61 | 0.01 |
| | Shree Cement TPS (2*150) | 300 | 0 | 137 | 149 | 3.13 | 130 | 3.10 | 0.03 |
| | Budhil HPS(IPP) (2*35) | 70 | 0 | 69 | 0 | 0.44 | 18 | 0.42 | 0.02 |
| | Sainj HPS (IPP) (2*50) | 100 | 0 | | | | | 0.92 | |
| | **Sub Total (G )** | **1762** | **0** | **1352** | **377** | **12.13** | **506** | **12.07** | **0.06** |
| **H. Total Regional Entities (A-G)** | | **25837** | **17671** | **19626** | **10382** | **291.05** | **12127** | **290.44** | **0.61** |

| I. State Entities | Station | Effective Installed Capacity (MW) | Peak MW | Off Peak MW | Energy(MU) | Average(Sentout MW) |
|---|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| **Punjab** | Guru Gobind Singh TPS (Ropar) (6*210) | 1260 | 160 | 160 | 3.42 | 142 |
| | Guru Nanak Dev TPS(Bhatinda) (2*110+2*120) | 460 | 0 | 0 | 0.00 | 0 |
| | Guru Hargobind Singh TPS(L.mbt) (2*210+2*250) | 920 | 0 | 0 | 0.00 | 0 |
| | Goindwal(GVK) (2*270) | 540 | 290 | 290 | 8.69 | 362 |
| | Rajpura (2*700) | 1400 | 660 | 660 | 15.81 | 659 |
| | Talwandi Saboo (3*660) | 1980 | 1250 | 1150 | 27.87 | 1161 |
| | **Thermal (Total)** | **6560** | **2360** | **2260** | 55.79 | **2324** |
| | Total Hydro | 1000 | 421 | 417 | 9.97 | 415 |
| | Wind Power | 0 | 0 | 0 | 0.00 | 0 |
| | Biomass | 303 | 0 | 0 | 0.13 | 5 |
| | Solar | 859 | 0 | 0 | 0.07 | 3 |
| | **Renewable(Total)** | **1162** | **0** | **0** | **0.19** | **8** |
| | **Total Punjab** | **8722** | **2781** | **2677** | **65.95** | **2748** |
| **Haryana** | Panipat TPS (2*210+2*250) | 920 | 221 | 226 | 5.25 | 219 |
| | DCRTPP (Yamuna nagar) (2*300) | 600 | 507 | 507 | 11.72 | 488 |
| | Faridabad GPS (NTPC)(2*137.75+1*156) | 432 | 174 | 179 | 4.13 | 172 |
| | 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 | 622 | 596 | 14.45 | 602 |
| | **Thermal (Total)** | **4497** | **1524** | **1508** | **35.55** | **1481** |
| | Total Hydro | 62 | 34 | 19 | 0.62 | 26 |
| | Wind Power | 0 | 0 | 0 | 0.00 | 0 |
| | Biomass | 106 | 0 | 0 | 0.00 | 0 |
| | Solar | 50 | 0 | 0 | 0.00 | 0 |
| | **Renewable(Total)** | **156** | **0** | **0** | **0.00** | **0** |
| | **Total Haryana** | **4715** | **1558** | **1527** | **36.17** | **1507** |
| **Rajasthan** | kota TPS (2*110+2*195+3*210) | 1240 | 739 | 746 | 18.01 | 750 |
| | suratgarh TPS (6*250) | 1500 | 365 | 370 | 8.65 | 360 |
| | Chabra TPS (4*250) | 1000 | 1316 | 1281 | 31.07 | 1295 |
| | Chabra TPS (1*660) | 660 | 0 | 0 | 0.00 | 0 |
| | Dholpur GPS (3*110) | 330 | 7 | 102 | 1.66 | 69 |
| | Ramgarh GPS(1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50) | 271 | 125 | 146 | 3.30 | 137 |
| | RAPS A (NPC) (1*100+1*200) | 300 | 168 | 158 | 4.15 | 173 |
| | Barsingsar (NLC) (2*125) | 250 | 218 | 182 | 5.13 | 214 |
| | Giral LTPS (2*125) | 250 | 0 | 0 | 0.00 | 0 |
| | Rajwest LTPS (IPP) (8*135) | 1080 | 381 | 378 | 11.86 | 494 |
| | VS LIGNITE LTPS (IPP) (1*135) | 135 | 0 | 0 | 0.00 | 0 |
| | Kalisindh Thermal(2*600) | 1200 | 412 | 411 | 10.43 | 434 |
| | Kawai(Adani) (2*660) | 1320 | 449 | 448 | 12.40 | 517 |
| | **Thermal (Total)** | **9536** | **4180** | **4222** | **106.65** | **4444** |
| | Total Hydro | 550 | 178 | 153 | 3.91 | 163 |
| | Wind power | 4292 | 465 | 558 | 11.30 | 471 |
| | Biomass | 102 | 20 | 20 | 0.49 | 20 |
| | Solar | 1995 | 0 | 0 | 3.11 | 129 |
| | Renewable/Others (Total) | 6389 | 485 | 578 | 14.89 | 621 |
| | **Total Rajasthan** | **16475** | **4843** | **4953** | **125.45** | **5227** |
| **UP** | Anpara TPS (3*210+2*500) | 1630 | 1127 | 1032 | 27.76 | 1157 |
| | Obra TPS (2*50+2*94+5*200) | 1194 | 457 | 455 | 10.30 | 429 |
| | Paricha TPS (2*110+2*220+2*250) | 1160 | 754 | 644 | 16.60 | 692 |
| | Panki TPS (2*105) | 210 | 126 | 126 | 2.60 | 108 |
| | Harduaganj TPS (1*60+1*105+2*250) | 665 | 421 | 416 | 10.00 | 417 |
| | Tanda TPS (NTPC) (4*110) | 440 | 359 | 292 | 7.42 | 309 |
| | Roza TPS (IPP) (4*300) | 1200 | 901 | 928 | 21.75 | 906 |
| | Anpara-C (IPP) (2*600) | 1200 | 1069 | 1102 | 26.13 | 1089 |
| | Bajaj Energy Pvt.Ltd(IPP) TPS (10*45) | 450 | 0 | 0 | 0.00 | 0 |
| | Anpara-D(2*500) | 1000 | 451 | 441 | 10.69 | 445 |
| | Lalitpur TPS(3*660) | 1980 | 1233 | 873 | 27.63 | 1151 |
| | Bara(2*660) | 1320 | 492 | 278 | 9.73 | 405 |
| | **Thermal (Total)** | **12449** | **7390** | **6587** | **170.60** | **7108** |
| | Vishnuparyag HPS (IPP)(4*110) | 440 | 246 | 246 | 5.75 | 240 |
| | Alaknanada(4*82.5) | 330 | 153 | 154 | 3.59 | 150 |
| | Other Hydro | 527 | 375 | 287 | 5.59 | 233 |
| | Cogeneration | 981 | 50 | 50 | 1.20 | 50 |
| | Wind Power | 0 | 0 | 0 | 0.00 | 0 |
| | Biomass | 26 | 0 | 0 | 0.00 | 0 |
| | Solar | 102 | 0 | 0 | 0.00 | 0 |
| | **Renewable(Total)** | **128** | **0** | **0** | **0.00** | **0** |
| | **Total UP** | **14855** | **8214** | **7324** | **186.73** | **7780** |
| **Uttarakhand** | Other Hydro | 1250 | 762 | 438 | 13.51 | 563 |
| | Total Gas | 450 | 94 | 94 | 2.44 | 102 |
| | Wind Power | 0 | 0 | 0 | 0.00 | 0 |
| | Biomass | 127 | 0 | 0 | 0.00 | 0 |
| | Solar | 100 | 0 | 0 | 0.60 | 25 |
| | Small Hydro (< 25 MW) | 180 | 0 | 0 | 0.00 | 0 |
| | **Renewable(Total)** | 407 | 0 | 0 | 0.60 | 25 |
| | **Total Uttarakhand** | **2107** | **856** | **532** | **16.55** | **690** |
| **Delhi** | Rajghat TPS (2*67.5) | 135 | 0 | 0 | 0.00 | 0 |
| | Delhi Gas Turbine (6x30 + 3x34) | 282 | 35 | 37 | 0.85 | 35 |
| | Pragati Gas Turbine (2x104+ 1x122) | 330 | 263 | 260 | 6.37 | 266 |
| | Rithala GPS (3*36) | 95 | 0 | 0 | 0.00 | 0 |
| | Bawana GPS (4*216+2*253) | 1370 | 270 | 252 | 6.30 | 263 |
| | Badarpur TPS (NTPC) (3*95+2*210) | 705 | 0 | 0 | 0.00 | 0 |
| | **Thermal (Total)** | **2917** | **568** | **549** | **13.53** | **564** |
| | Wind Power | 0 | 0 | 0 | 0.00 | 0 |
| | Biomass | 16 | 0 | 0 | 0.00 | 0 |
| | Solar | 2 | 0 | 0 | 0.00 | 0 |
| | **Renewable(Total)** | **18** | **0** | **0** | **0.00** | **0** |
| | **Total Delhi** | **2935** | **568** | **549** | **13.53** | **564** |
| **HP** | Baspa HPS (IPP) (3*100) | 300 | 134 | 144 | 2.33 | 97 |
| | Malana HPS (IPP) (2*43) | 86 | 81 | 0 | 0.63 | 26 |
| | Other Hydro (>25MW) | 372 | 171 | 137 | 3.94 | 164 |
| | Wind Power | 0 | 0 | 0 | 0.00 | 0 |
| | Biomass | 0 | 0 | 0 | 0.00 | 0 |
| | Solar | 0 | 0 | 0 | 0.00 | 0 |
| | Small Hydro (< 25 MW) | 486 | 144 | 125 | 3.16 | 132 |
| | **Renewable(Total)** | **486** | **144** | **125** | **3.16** | **132** |
| | **Total HP** | **1244** | **530** | **407** | **10.06** | **419** |
| **J & K** | Baglihar HPS (IPP) (3*150+3*150) | 900 | 274 | 273 | 6.57 | 274 |
| | Other Hydro/IPP(including 98 MW Small Hydro) | 308 | 101 | 42 | 1.46 | 61 |
| | Gas/Diesel/Others | 190 | 0 | 0 | 0.00 | 0 |
| | Wind Power | 0 | 0 | 0 | 0.00 | 0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Biomass | 0 | 0 | 0 | 0.00 | 0 |
| | Solar | 0 | 0 | 0 | 0.00 | 0 |
| | Small Hydro (< 25 MW)Included in Other Hydro Above | 98 | 0 | 0 | 0.00 | 0 |
| | **Renewable(Total)** | **98** | **0** | **0** | **0.00** | **0** |
| | **Total J & K** | **1398** | **375** | **315** | **8** | **335** |
| **Total State Control Area Generation** | | **52451** | **19725** | **18284** | **462.46** | **19269** |
| **J. Net Inter Regional Exchange** [Import (+ve)/Export (-ve)] | | | **5395** | **7044.17** | **165.41** | **6892** |
| **Total Regional Availability(Gross)** | | **78288** | **44747** | **35710** | **918.92** | **38288** |

**IV. Total Hydro Generation:**

| | | | | | |
|---|---|---|---|---|---|
| **Regional Entities Hydro** | **12234** | **10027** | **1437** | **91.59** | **3798** |
| **State Control Area Hydro** | **7468** | **3168** | **2530** | **57.86** | **2669** |
| **Total Regional Hydro** | **19702** | **13196** | **3967** | **149.45** | **6467** |

**V. Total Renewable Generation:**

| | | | | | |
|---|---|---|---|---|---|
| **Regional Entities Renewable** | **30** | **0** | **0** | **0.07** | **3** |
| **State Control Area Renewable** | **8844** | **629** | **703** | **18.84** | **785** |
| **Total Regional Renewable** | **8874** | **629** | **703** | **18.91** | **788** |

**VI(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(HVDC B/B) | -250 | -100 | 0 | 250 | 0.00 | 4.97 | -4.97 |
| 765 KV Gwalior-Agra (D/C) | 1327 | 1954 | 2093 | 0 | 38.79 | 0.00 | 38.79 |
| 400 KV Zerda-Kankroli | -125 | -81 | 0 | 205 | 0.00 | 2.92 | -2.92 |
| 400 KV Zerda-Bhinmal | -8 | -93 | 65 | 207 | 0.00 | 1.46 | -1.46 |
| 220 KV Auraiya-Malanpur | -89 | -61 | 0 | 94 | 0.00 | 1.51 | -1.51 |
| 220 KV Badod-Kota/Morak | -19 | -102 | 49 | 93 | 0.00 | 1.29 | -1.29 |
| Mundra-Mohindergarh(HVDC Bipole) | 1202 | 1602 | 1611 | 0 | 34.40 | 0.00 | 34.40 |
| 400 KV RAPPC-Sujalpur | 190 | 152 | 196 | 4 | 2.46 | 0.00 | 2.46 |
| 400 KV Vindhyachal-Rihand | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 765 kV Phagi-Gwalior (D/C) | 510 | 1029 | 526 | 0 | 18.91 | 0.00 | 18.91 |
| +/- 800 kV HVDC Champa-Kurushetra | 600 | 0 | 3000 | 0 | 10.99 | 0 | 10.99 |
| **Sub Total WR** | **3338** | **4299** | | | **105.55** | **12.15** | **93.39** |
| 400 kV Sasaram - Varanasi | 117 | 84 | 117 | 0 | 2.26 | 0.00 | 2.26 |
| 400 kV Sasaram - Allahabad | 22 | 11 | 25 | 0 | 0.01 | 0.00 | 0.01 |
| 400 KV MZP- GKP (D/C) | 139 | 670 | 841 | 0 | 12.36 | 0.00 | 12.36 |
| 400 KV Patna-Balia(D/C) X 2 | 663 | 386 | 390 | 0 | 20.41 | 0.00 | 20.41 |
| 400 KV B'Sharif-Balia (D/C) | 0 | 120 | 206 | 24 | 3.73 | 0.00 | 3.73 |
| 765 KV Gaya-Balia | 97 | 149 | 188 | 0 | 3.96 | 0.00 | 3.96 |
| 765 KV Gaya-Varanasi (D/C) | 52 | 318 | 342 | 91 | 4.19 | 0.00 | 4.19 |
| 220 KV Pusauli-Sahupuri | 129 | 123 | 135 | 0 | 2.82 | 0.00 | 2.82 |
| 132 KV K'nasa-Sahupuri | 0 | 0 | 1 | 0 | 0.00 | 0.00 | 0.00 |
| 132 KV Son Ngr-Rihand | 0 | 0 | 0 | 0 | 0.00 | 0.52 | -0.52 |
| 132 KV Garhwa-Rihand | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 765 KV Sasaram - Fatehpur | -226 | -48 | 0 | 226 | 0.00 | 1.07 | -1.07 |
| 400 KV Barh -GKP (D/C) | -284 | -174 | 0 | 296 | 0.00 | 4.25 | -4.25 |
| 400 kV B'Sharif - Varanasi (D/C) | 148 | -94 | 201 | 161 | 0.52 | 0.00 | 0.52 |
| +/- 800 KV HVDC Alipurduar-Agra | 500 | 500 | 500 | 0 | 13.81 | 0.00 | 13.81 |
| **Sub Total ER** | **1357** | **2045** | | | **64.07** | **5.84** | **58.23** |
| +/- 800 KV HVDC BiswanathCharialli-Agra | 700 | 700 | 700 | 0.00 | 13.79 | 0.00 | 13.79 |
| **Sub Total NER** | **700** | **700** | | | **13.79** | **0.00** | **13.79** |
| **Total IR Exch** | **5395** | **7044** | | | **183.41** | **18.00** | **165.41** |

**VI(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 |
| 44.95 | 1.63 | 46.59 | -5.71 | -6.60 | -5.71 | -7.08 | 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 |
| 35.17 | 135.53 | 170.69 | 72.02 | 93.39 | 165.41 | 36.85 | -42.13 | -5.28 |

**VI(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 |
|---|---|---|---|---|---|---|---|
| | MW | MW | Import | Export | Import | Export | MU |
| 132 KV Tanakpur - Mahendarnagar | -13 | 0 | 0 | 22 | 0 | 0 | -0.05 |

**VII. 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 | 0.24 | 8.61 | 61.55 | 82.75 | 7.99 | 0.72 | 0.00 | 0.00 |

| <---------- Frequency (Hz) ----------> | | | | Average | Frequency | Std. Dev. | Frequency in 15 Min Block | | Freq Dev Index (% of Time) |
|---|---|---|---|---|---|---|---|---|---|
| Maximum | | Minimum | | Frequency | Variation | | MAX | MIN | |
| Freq | Time | Freq | Time | Hz | Index | | (Hz) | (Hz) | |
| 50.14 | 6.02 | 49.73 | 21.05 | 49.98 | 0.034 | 0.055 | 50.06 | 49.89 | 17.25 |

**VIII(A). Voltage profile 400 kV**

| Station | Voltage Level (kV) | Maximum | | Minimum | | Voltage (in % of Time) | | | | Voltage Deviation Index |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Voltage(KV) | Time | Voltage (KV) | Time | <380 kV | <390 kV | >420 kV | >430 kV | |
| Rihand | 400 | 406 | 14:06 | 402 | 17:55 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Gorakhpur | 400 | 415 | 8:32 | 396 | 17:54 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bareilly(PG)400kV | 400 | 413 | 0:14 | 403 | 18:10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kanpur | 400 | 417 | 14:01 | 408 | 18:10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dadri | 400 | 418 | 2:59 | 407 | 18:08 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Ballabhgarh | 400 | 418 | 2:48 | 408 | 18:08 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bawana | 400 | 420 | 2:43 | 410 | 11:11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bassi | 400 | 423 | 20:57 | 402 | 5:43 | 0.0 | 0.0 | 4.6 | 0.0 | 4.6 |
| Hissar | 400 | 417 | 14:05 | 404 | 18:09 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Moga | 400 | 420 | 0:44 | 408 | 18:07 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Abdullapur | 400 | 420 | 2:50 | 406 | 18:09 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Nalagarh | 400 | 432 | 2:53 | 414 | 18:06 | 0.0 | 0.0 | 70.6 | 1.4 | 70.6 |
| Kishenpur | 400 | 424 | 1:55 | 399 | 18:10 | 0.0 | 0.0 | 14.9 | 0.0 | 14.9 |
| Wagoora | 400 | 408 | 2:51 | 369 | 18:14 | 21.2 | 63.7 | 0.0 | 0.0 | 21.2 |
| Amritsar | 400 | 428 | 2:53 | 412 | 18:08 | 0.0 | 0.0 | 44.6 | 0.0 | 44.6 |
| Kashipur | 400 | 0 | 0:00 | 0 | 0:00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Hamirpur | 400 | 425 | 1:53 | 407 | 18:11 | 0.0 | 0.0 | 17.9 | 0.0 | 17.9 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Rishikesh | 400 | 416 | 20:57 | 403 | 12:38 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

**VIII(B). Voltage profile 765 kV**

| Station | Voltage Level (kV) | Maximum | | Minimum | | Voltage (in % of Time) | | | | Voltage Deviation Index |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Voltage(KV) | Time | Voltage (KV) | Time | <728 kV | <742 kV | >800 kV | >820 kV | |
| Fatehpur | 765 | 781 | 14:04 | 758 | 4:50 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Balia | 765 | 772 | 0:00 | 772 | 0:00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Moga | 765 | 799 | 14:05 | 778 | 8:41 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Agra | 765 | 794 | 14:05 | 771 | 5:42 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bhiwani | 765 | 804 | 21:00 | 784 | 5:40 | 0.0 | 0.0 | 1.1 | 0.0 | 1.1 |
| Unnao | 765 | 767 | 14:04 | 753 | 17:55 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Lucknow | 765 | 786 | 8:03 | 767 | 17:56 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Meerut | 765 | 804 | 20:54 | 782 | 23:08 | 0.0 | 0.0 | 2.4 | 0.0 | 2.4 |
| Jhatikara | 765 | 800 | 14:03 | 783 | 5:41 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bareilly 765 kV | 765 | 787 | 0:19 | 771 | 18:09 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anta | 765 | 795 | 21:16 | 775 | 5:53 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Phagi | 765 | 800 | 20:54 | 777 | 5:39 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

**Note :** "0" in Max / Min Col -> Telemetry Outage

**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 | 507.39 | 1426.07 | 499.92 | 1088.42 | 297.16 | 346.77 |
| Pong | 426.72 | 384.05 | 418.16 | 807.91 | 415.35 | 693.24 | 68.87 | 374.40 |
| Tehri | 829.79 | 740.04 | 824.15 | 1089.96 | 823.95 | 1086.79 | 94.53 | 153.00 |
| Koteshwar | 612.50 | 598.50 | 610.71 | 4.90 | 611.04 | 5.00 | 153.00 | 146.83 |
| Chamera-I | 760.00 | 748.75 | 754.67 | 0.00 | 0.00 | 0.00 | 84.90 | 74.35 |
| 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 | 515.19 | 3.13 | 515.07 | 2.99 | 69.95 | 134.89 |

*** 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** | -329 | -145 | 0 | -431 | 0 | 0 | -8.51 | -1.11 | -9.62 |
| **Delhi** | -124 | -247 | 0 | -184 | 1 | 0 | -4.54 | -3.60 | -8.14 |
| **Haryana** | 30 | 22 | 0 | 30 | 27 | 0 | -0.91 | 1.11 | 0.20 |
| **HP** | -20 | -37 | 0 | -20 | -895 | 0 | 1.05 | -7.51 | -6.46 |
| **J&K** | 157 | 257 | 0 | 157 | 0 | 0 | 3.77 | 3.11 | 6.88 |
| **CHD** | 0 | 0 | 0 | 0 | -81 | 0 | 0.00 | -0.27 | -0.27 |
| **Rajasthan** | -102 | 102 | 0 | -102 | 104 | 0 | -2.44 | 3.14 | 0.70 |
| **UP** | 34 | -68 | 0 | 34 | -68 | 0 | 0.78 | -1.59 | -0.81 |
| **Uttarakhand** | 5 | 0 | 0 | 5 | -113 | 0 | 0.49 | 0.74 | 1.22 |
| **Total** | **-347** | **-117** | **0** | **-509** | **-1024** | **0** | **-10.30** | **-5.99** | **-16.29** |

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

| State | Bilateral (MW) | | IEX (MW) | | PXIL (MW) | |
|---|---|---|---|---|---|---|
| | Maximum | Minimum | Maximum | Minimum | Maximum | Minimum |
| **Punjab** | -329 | -431 | 24 | -304 | 0 | 0 |
| **Delhi** | -124 | -225 | 1 | -382 | 0 | 0 |
| **Haryana** | 30 | -254 | 76 | 22 | 0 | 0 |
| **HP** | 108 | -20 | 4 | -1030 | 0 | 0 |
| **J&K** | 157 | 157 | 326 | -142 | 0 | 0 |
| **CHD** | 0 | 0 | 0 | -81 | 0 | 0 |
| **Rajasthan** | -102 | -102 | 538 | -186 | 0 | 0 |
| **UP** | 34 | 24 | 0 | -68 | 0 | 0 |
| **Uttarakhand** | 64 | 5 | 135 | -159 | 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** | **0.00%** |
| **ER** | **0.00%** |
| **Simultaneous** | **0.00%** |

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

| | |
|---|---|
| **WR** | **0.00%** |
| **ER** | **0.00%** |
| **Simultaneous** | **0.00%** |

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

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

**XII. Zero Crossing Violations**

| State | No. of violations(Maximum 8 in a day) | Maximum number of continuous blocks without sign change |
|---|---|---|
| Punjab | 3 | 21 |
| Haryana | 2 | 20 |
| Rajasthan | 2 | 15 |
| Delhi | 5 | 27 |
| UP | 2 | 17 |
| Uttarakhand | 6 | 38 |
| HP | 5 | 54 |
| J & K | 4 | 25 |
| Chandigarh | 4 | 32 |

**XIII.System Constraints:**

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

**XV. Weather Conditions For 22.10.2017 :**

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

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

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

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

Note: Data(regarding drawal,generation, shortage , inter-regional flows and reservoir levels)of the constituents filled in the report are as per last furnished data by the respective state/constituent to NRLDC.

**Report for : 22.10.2017** **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**