# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(भारत सरकार का उद्यम)

## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

**Power Supply Position in Northern Region for 24.01.2017**

**Date of Reporting : 25.01.2017**

**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 |
| 42945 | 487 | 43432 | 49.98 | 30393 | 488 | 30881 | 49.99 | 901.56 | 12.21 |

* 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 | Renewable/others $ | Total | | | | | |
| Punjab | 62.21 | 8.24 | 0.26 | 70.71 | 36.75 | 37.30 | 0.56 | 108.02 | 0.00 |
| Haryana | 51.69 | 0.28 | 0.00 | 51.98 | 67.17 | 67.17 | 0.00 | 119.14 | 0.00 |
| Rajasthan | 127.14 | 4.61 | 21.12 | 152.88 | 58.83 | 61.22 | 2.39 | 214.09 | 1.20 |
| Delhi | 10.68 | | 0.00 | 10.68 | 53.80 | 53.14 | -0.66 | 63.83 | 0.02 |
| UP | 185.60 | 6.02 | 0.00 | 191.62 | 95.78 | 94.80 | -0.98 | 286.42 | 0.37 |
| Uttarakhand | | 8.49 | 0.00 | 13.30 | 23.60 | 22.82 | -0.77 | 36.12 | 0.00 |
| HP | | 4.68 | 0.97 | 4.68 | 21.57 | 22.80 | 1.23 | 27.48 | 0.00 |
| J & K | | 4.13 | 0.00 | 4.13 | 39.93 | 38.52 | -1.41 | 42.65 | 10.62 |
| Chandigarh | | | | 0.00 | 3.91 | 3.80 | -0.11 | 3.80 | 0.00 |
| Total | 437.33 | 36.45 | 22.35 | 499.97 | 401.34 | 401.59 | 0.25 | 901.56 | 12.21 |

* 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 | 5779 | 0 | -19 | -1008 | 3159 | 0 | -41 | -535 | 5797 | 18:00 | 0 |
| Haryana | 6536 | 0 | 0 | -254 | 3184 | 0 | 0 | -507 | 6536 | 19:00 | 0 |
| Rajasthan | 9199 | 0 | -199 | -539 | 7903 | 0 | 140 | 303 | 10049 | 8:00 | 0 |
| Delhi | 3149 | 0 | -88 | -119 | 1487 | 0 | -53 | -647 | 3711 | 11:00 | 0 |
| UP | 12982 | 0 | 21 | -207 | 10933 | 0 | 146 | 114 | 13913 | 8:00 | 0 |
| Uttarakhand | 1894 | 0 | 44 | 647 | 1202 | 0 | -88 | 459 | 1971 | 8:00 | 0 |
| HP | 1259 | 0 | 44 | 345 | 780 | 75 | 9 | 543 | 1368 | 8:00 | 75 |
| J&K | 1949 | 487 | -88 | 946 | 1652 | 413 | -75 | 619 | 2073 | 8:00 | 518 |
| Chandigarh | 197 | 0 | -27 | 20 | 93 | 0 | 1 | 0 | 224 | 9:00 | 0 |
| Total | 42945 | 487 | -313 | -170 | 30393 | 488 | 38 | 351 | 42980 | 8:00 | 594 |

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

Diversity is 1.06

**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 | 1890 | 2047 | 1851 | 43.75 | 1823 | 43.24 | 0.51 |
| | Rihand I STPS (2*500) | 1000 | 473 | 494 | 391 | 10.27 | 428 | 10.11 | 0.15 |
| | Rihand II STPS (2*500) | 1000 | 958 | 800 | 757 | 20.77 | 865 | 20.79 | -0.03 |
| | Rihand III STPS (2*500) | 1000 | 963 | 919 | 723 | 20.53 | 855 | 20.72 | -0.19 |
| | Dadri I STPS (4*210) | 840 | 815 | 326 | 311 | 7.50 | 313 | 7.74 | -0.24 |
| | Dadri II STPS (2*490) | 980 | 980 | 375 | 337 | 8.71 | 363 | 9.26 | -0.55 |
| | Unchahar I TPS (2*210) | 420 | 407 | 312 | 298 | 7.17 | 299 | 7.63 | -0.45 |
| | Unchahar II TPS (2*210) | 420 | 405 | 293 | 286 | 6.92 | 288 | 7.50 | -0.58 |
| | Unchahar III TPS (1*210) | 210 | 203 | 137 | 146 | 3.34 | 139 | 3.70 | -0.36 |
| | ISTPP (Jhajjhar) (3*500) | 1500 | 1440 | 0 | 0 | 0.00 | 0 | 0.01 | -0.01 |
| | Dadri GPS (4*130.19+2*154.51) | 830 | 819 | 144 | 153 | 3.57 | 149 | 4.02 | -0.45 |
| | Anta GPS (3*88.71+1*153.2) | 419 | 420 | 0 | 0 | 0.00 | 0 | 0.00 | 0.00 |
| | Auraiya GPS (4*111.19+2*109.30) | 663 | 644 | 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 | 0.04 | 2 | 0.04 | 0.00 |
| | Singrauli Solar(15) | 15 | 2 | 0 | 0 | 0.05 | 2 | 0.05 | 0.00 |
| | KHEP(4*200) | 800 | 872 | 870 | 645 | 2.67 | 111 | 2.62 | 0.05 |
| | **Sub Total (A)** | **12112** | **11291** | **6717** | **5898** | **135** | **5638** | **137** | **-2.14** |
| B. NPC | NAPS (2*220) | 440 | 417 | 450 | 456 | 9.93 | 414 | 10.01 | -0.08 |
| | RAPS- B (2*220) | 440 | 394 | 442 | 449 | 9.63 | 401 | 9.46 | 0.18 |
| | RAPS- C (2*220) | 440 | 365 | 417 | 302 | 7.99 | 333 | 8.76 | -0.77 |
| | **Sub Total (B)** | **1320** | **1176** | **1309** | **1207** | **27.55** | **1148** | **28.22** | **-0.67** |
| C. NHPC | Chamera I HPS (3*180) | 540 | 540 | 543 | 0 | 1.78 | 74 | 1.62 | 0.16 |
| | Chamera II HPS (3*100) | 300 | 301 | 309 | 0 | 1.05 | 44 | 0.93 | 0.12 |
| | Chamera III HPS (3*77) | 231 | 154 | 154 | 0 | 0.49 | 20 | 0.46 | 0.02 |
| | Bairasuil HPS(3*60) | 180 | 120 | 124 | 0 | 0.66 | 28 | 0.55 | 0.11 |
| | Salal-HPS (6*115) | 690 | 70 | 228 | 70 | 2.05 | 85 | 1.67 | 0.38 |
| | Tanakpur-HPS (3*31.4) | 94 | 20 | 31 | 21 | 0.55 | 23 | 0.47 | 0.08 |
| | Uri-I HPS (4*120) | 480 | 108 | 126 | 82 | 2.82 | 117 | 2.60 | 0.22 |
| | Uri-II HPS (4*60) | 240 | 70 | 121 | 79 | 1.74 | 73 | 1.69 | 0.05 |
| | Dhauliganga-HPS (4*70) | 280 | 140 | 136 | 0 | 0.78 | 32 | 0.74 | 0.04 |
| | Dulhasti-HPS (3*130) | 390 | 257 | 267 | 0 | 2.63 | 110 | 2.50 | 0.13 |
| | Sewa-II HPS (3*40) | 120 | 119 | 112 | 0 | 0.36 | 15 | 0.36 | 0.00 |
| | Parbati 3 (4*130) | 520 | 130 | 133 | 0 | 0.33 | 14 | 0.33 | 0.01 |
| | **Sub Total (C )** | **4065** | **2029** | **2283** | **252** | **15** | **635** | **14** | **1.33** |
| D.SJVNL | NJPC (6*250) | 1500 | 1538 | 1333 | 0 | 6.17 | 257 | 6.10 | 0.07 |
| | Rampur HEP (6*68.67) | 412 | 420 | 371 | 0 | 1.74 | 72 | 1.70 | 0.04 |
| | **Sub Total (D)** | **1912** | **1959** | **1704** | **0** | **7.90** | **329** | **7.79** | **0.11** |
| E. THDC | Tehri HPS (4*250) | 1000 | 954 | 905 | 0 | 8.68 | 362 | 8.70 | -0.02 |
| | Koteshwar HPS (4*100) | 400 | 133 | 397 | 65 | 3.26 | 136 | 3.20 | 0.06 |
| | **Sub Total (E)** | **1400** | **1087** | **1302** | **65** | **11.94** | **497** | **11.90** | **0.04** |
| F. BBMB | Bhakra HPS (2*108+3*126+5*157) | 1379 | 529 | 1035 | 373 | 13.31 | 555 | 12.69 | 0.62 |
| | Dehar HPS (6*165) | 990 | 90 | 330 | 0 | 2.23 | 93 | 2.16 | 0.07 |
| | Pong HPS (6*66) | 396 | 169 | 330 | 0 | 4.04 | 168 | 4.06 | -0.02 |
| | **Sub Total (F)** | **2765** | **788** | **1695** | **373** | **19.58** | **816** | **18.91** | **0.67** |
| G. IPP(s)/JV(s) | ALLAIN DUHANGAN HPS(IPP) (2*96) | 192 | 0 | 68 | 0 | 0.37 | 16 | 0.36 | 0.02 |
| | KARCHAM WANGTOO HPS(IPP) (4*250) | 1000 | 0 | 672 | 0 | 3.13 | 131 | 3.56 | -0.42 |
| | Malana Stg-II HPS (2*50) | 100 | 0 | 0 | 0 | 0.19 | 8 | 0.17 | 0.01 |
| | Shree Cement TPS (2*150) | 300 | 0 | 296 | 180 | 6.18 | 257 | 6.31 | -0.13 |
| | Budhil HPS(IPP) (2*35) | 70 | 0 | 0 | 0 | 0.14 | 6 | 0.15 | -0.01 |
| | **Sub Total (G )** | **1662** | **0** | **1036** | **180** | **10.01** | **417** | **10.54** | **-0.53** |
| **H. Total Regional Entities (A-G)** | | **25237** | **18331** | **16046** | **7974** | **227.52** | **9480** | **228.73** | **-1.21** |

| 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 | 0 | 0 | -0.12 | -5 |
| | Guru Nanak Dev TPS(Bhatinda) (2*110+2*120) | 460 | 0 | 0 | -0.02 | -1 |
| | Guru Hargobind Singh TPS(L.mbt) (2*210+2*250) | 920 | 382 | 390 | 8.90 | 371 |
| | Goindwal(GVK) (2*270) | 540 | 0 | 0 | -0.03 | -1 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Rajpura (2*700) | 1400 | 1220 | 660 | 24.98 | 1041 |
| | Talwandi Saboo (3*660) | 1980 | 924 | 924 | 28.50 | 1188 |
| | **Thermal (Total)** | **6560** | **2526** | **1974** | 62.21 | **2592** |
| | Total Hydro | 1000 | 338 | 215 | 8.24 | 343 |
| | Wind Power | 0 | 0 | 0 | 0.00 | 0 |
| | Biomass | 288 | 0 | 0 | 0.25 | 11 |
| | Solar | 560 | 0 | 0 | 0.00 | 0 |
| | **Renewable(Total)** | **848** | **0** | **0** | **0.26** | **11** |
| | **Total Punjab** | **8408** | **2864** | **2189** | **70.71** | **2946** |
| **Haryana** | Panipat TPS (2*210+2*250) | 920 | 0 | 0 | 0.00 | 0 |
| | DCRTPP (Yamuna nagar) (2*300) | 600 | 246 | 231 | 5.76 | 240 |
| | Faridabad GPS (NTPC)(2*137.75+1*156) | 432 | 0 | 0 | 0.00 | 0 |
| | RGTPP (khedar) (IPP) (2*600) | 1200 | 1163 | 757 | 24.06 | 1002 |
| | Magnum Diesel (IPP) | 25 | 0 | 0 | 0.00 | 0 |
| | Jhajjar(CLP) (2*660) | 1320 | 1233 | 736 | 21.88 | 912 |
| | **Thermal (Total)** | **4497** | **2642** | **1724** | **51.69** | **2154** |
| | Total Hydro | 62 | 6 | 10 | 0.28 | 12 |
| | Wind Power | 0 | 0 | 0 | 0.00 | 0 |
| | Biomass | 40 | 0 | 0 | 0.00 | 0 |
| | Solar | 0 | 0 | 0 | 0.00 | 0 |
| | **Renewable(Total)** | **40** | **0** | **0** | **0.00** | **0** |
| | **Total Haryana** | **4599** | **2648** | **1734** | **51.98** | **2166** |
| **Rajasthan** | kota TPS (2*110+2*195+3*210) | 1240 | 974 | 957 | 24.53 | 1022 |
| | suratgarh TPS (6*250) | 1500 | 183 | 181 | 4.67 | 195 |
| | Chabra TPS (4*250) | 1000 | 747 | 762 | 19.41 | 809 |
| | 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 | 152 | 148 | 3.75 | 156 |
| | RAPS A (NPC) (1*100+1*200) | 300 | 190 | 190 | 4.38 | 183 |
| | Barsingsar (NLC) (2*125) | 250 | 224 | 226 | 5.28 | 220 |
| | Giral LTPS (2*125) | 250 | 0 | 0 | 0.00 | 0 |
| | Rajwest LTPS (IPP) (8*135) | 1080 | 675 | 564 | 17.80 | 742 |
| | VS LIGNITE LTPS (IPP) (1*135) | 135 | 0 | 0 | 0.00 | 0 |
| | Kalisindh Thermal(2*600) | 1200 | 908 | 831 | 23.50 | 979 |
| | Kawai(Adani) (2*660) | 1320 | 1179 | 802 | 23.83 | 993 |
| | **Thermal (Total)** | **8876** | **5232** | **4661** | **127.14** | **5298** |
| | Total Hydro | 550 | 111 | 195 | 4.61 | 192 |
| | Wind power | 4017 | 1143 | 841 | 19.33 | 805 |
| | Biomass | 99 | 7 | 7 | 0.12 | 5 |
| | Solar | 1295 | 0 | 0 | 1.68 | 70 |
| | Renewable/Others (Total) | 5411 | 1150 | 848 | 21.12 | 880 |
| | **Total Rajasthan** | **14837** | **6493** | **5704** | **152.88** | **6370** |
| **UP** | Anpara TPS (3*210+2*500) | 1630 | 1248 | 1095 | 30.22 | 1259 |
| | Obra TPS (2*50+2*94+5*200) | 1194 | 676 | 567 | 14.96 | 623 |
| | Paricha TPS (2*110+2*220+2*250) | 1160 | 135 | 138 | 3.45 | 144 |
| | Panki TPS (2*105) | 210 | 0 | 0 | 0.00 | 0 |
| | Harduaganj TPS (1*60+1*105+2*250) | 665 | 316 | 410 | 8.89 | 370 |
| | Tanda TPS (NTPC) (4*110) | 440 | 273 | 315 | 8.14 | 339 |
| | Roza TPS (IPP) (4*300) | 1200 | 747 | 752 | 19.57 | 816 |
| | Anpara-C (IPP) (2*600) | 1200 | 1046 | 648 | 23.38 | 974 |
| | Bajaj Energy Pvt.Ltd(IPP) TPS (10*45) | 450 | 0 | 0 | 0.00 | 0 |
| | Anpara-D(2*500) | 1000 | 622 | 311 | 12.06 | 503 |
| | Lalitpur TPS(3*660) | 1980 | 729 | 734 | 20.74 | 864 |
| | Bara(2*660) | 1320 | 996 | 720 | 23.80 | 992 |
| | **Thermal (Total)** | **12449** | **6788** | **5690** | **165.20** | **6883** |
| | Vishnuparyag HPS (IPP)(4*110) | 440 | 68 | 69 | 1.65 | 69 |
| | Alaknanada(4*82.5) | 330 | 76 | 0 | 0.96 | 40 |
| | Other Hydro | 527 | 232 | 83 | 3.41 | 142 |
| | Cogeneration | 981 | 850 | 850 | 20.40 | 850 |
| | 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** | **8014** | **6692** | **191.62** | **7984** |
| **Uttarakhand** | Other Hydro | 1250 | 360 | 538 | 8.49 | 354 |
| | Total Gas | 225 | 192 | 207 | 4.76 | 198 |
| | Wind Power | 0 | 0 | 0 | 0.00 | 0 |
| | Biomass | 127 | 0 | 0 | 0.00 | 0 |
| | Solar | 20 | 0 | 0 | 0.05 | 2 |
| | Small Hydro (< 25 MW) | 180 | 0 | 0 | 0.00 | 0 |
| | **Renewable(Total)** | 327 | 0 | 0 | 0.05 | 2 |
| | **Total Uttarakhand** | 1802 | 552 | 745 | 13.30 | 554 |
| **Delhi** | Rajghat TPS (2*67.5) | 135 | 0 | 0 | -0.01 | 0 |
| | Delhi Gas Turbine (6x30 + 3x34) | 282 | 33 | 34 | 0.94 | 39 |
| | Pragati Gas Turbine (2x104+ 1x122) | 330 | 154 | 161 | 3.83 | 160 |
| | Rithala GPS (3*36) | 95 | 0 | 0 | 0.00 | 0 |
| | Bawana GPS (4*216+2*253) | 1370 | 249 | 280 | 6.07 | 253 |
| | Badarpur TPS (NTPC) (3*95+2*210) | 705 | 0 | 0 | -0.15 | -6 |
| | **Thermal (Total)** | **2917** | **436** | **475** | **10.68** | **445** |
| | 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** | **436** | **475** | **10.68** | **445** |
| **HP** | Baspa HPS (IPP) (3*100) | 300 | 0 | 0 | 0.90 | 37 |
| | Malana HPS (IPP) (2*43) | 86 | 30 | 0 | 0.17 | 7 |
| | Other Hydro | 372 | 82 | 56 | 2.64 | 110 |
| | 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 | 45 | 35 | 0.97 | 41 |
| | **Renewable(Total)** | **486** | **45** | **35** | **0.97** | **41** |
| | **Total HP** | **1244** | **157** | **91** | **4.68** | **195** |
| **J & K** | Baglihar HPS (IPP) (3*150+3*150) | 900 | 116 | 117 | 2.80 | 117 |
| | Other Hydro/IPP(including 98 MW Small Hydro) | 308 | 94 | 39 | 1.33 | 55 |
| | 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** | **210** | **156** | **4** | **172** |

| | | | | | |
|---|---|---|---|---|---|
| **Total State Control Area Generation** | **50078** | **21374** | **17786** | **499.97** | **20832** |
| **J. Net Inter Regional Exchange** [Import (+ve)/Export (-ve)] | | **7031** | **7048** | **197.97** | **8249** |
| **Total Regional Availability(Gross)** | **75315** | **44451** | **32808** | **925.46** | **38561** |

**IV. Total Hydro Generation:**

| | | | | | |
|---|---|---|---|---|---|
| **Regional Entities Hydro** | **12234** | **8594** | **1334** | **61.02** | **2542** |
| **State Control Area Hydro** | **7163** | **1750** | **1564** | **36.45** | **1719** |
| **Total Regional Hydro** | **19397** | **10343** | **2899** | **97.47** | **4261** |

**V. Total Renewable Generation:**

| | | | | | |
|---|---|---|---|---|---|
| **Regional Entities Renewable** | **30** | **0** | **0** | **0.11** | **5** |
| **State Control Area Renewable** | **7356** | **1195** | **883** | **22.40** | **933** |
| **Total Regional Renewable** | **7386** | **1195** | **883** | **22.51** | **938** |

**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) | 50 | -500 | 50 | 500 | 0.28 | 6.32 | -6.05 |
| 765 KV Gwalior-Agra (D/C) | 2450 | 2121 | 3065 | 0 | 63.35 | 0.00 | 63.35 |
| 400 KV Zerda-Kankroli | -183 | -201 | 0 | 279 | 0.00 | 3.50 | -3.50 |
| 400 KV Zerda-Bhinmal | -117 | -121 | 107 | 236 | 0.00 | 1.21 | -1.21 |
| 220 KV Auraiya-Malanpur | -68 | -33 | 0 | 71 | 0.00 | 0.96 | -0.96 |
| 220 KV Badod-Kota/Morak | -56 | -68 | 17 | 71 | 0.00 | 1.43 | -1.43 |
| Mundra-Mohindergarh(HVDC Bipole) | 2498 | 2503 | 2506 | 0.00 | 60.44 | 0.00 | 60.44 |
| 400 KV RAPPC-Sujalpur | 130 | 190 | 390 | 0 | 4.79 | 0.00 | 4.79 |
| 400 KV Vindhyachal-Rihand | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 765 kV Phagi-Gwalior (D/C) | 1009 | 1095 | 749 | 0 | 29.22 | 0.00 | 29.22 |
| **Sub Total WR** | **5713** | **4986** | | | **158.07** | **13.42** | **144.65** |
| 400 kV Sasaram - Varanasi | 205 | 185 | 198 | 0 | 6.74 | 0.00 | 6.74 |
| 400 kV Sasaram - Allahabad | 42 | 57 | 78 | 0 | 1.35 | 0.00 | 1.35 |
| 400 KV MZP- GKP (D/C) | -32 | 377 | 395 | 106 | 6.18 | 0.00 | 6.18 |
| 400 KV Patna-Balia(D/C) X 2 | 536 | 607 | 754 | 0 | 15.47 | 0.00 | 15.47 |
| 400 KV B'Sharif-Balia (D/C) | -63 | 116 | 171 | 84 | 2.06 | 0.00 | 2.06 |
| 765 KV Gaya-Balia | 182 | 285 | 354 | 0 | 6.34 | 0.00 | 6.34 |
| 765 KV Gaya-Varanasi (D/C) | 345 | 497 | 792 | 0 | 14.16 | 0.00 | 14.16 |
| 220 KV Pusauli-Sahupuri | 148 | 99 | 148 | 0 | 2.68 | 0.00 | 2.68 |
| 132 KV K'nasa-Sahupuri | 0 | 0 | 0 | 0 | 0.00 | 0.51 | -0.51 |
| 132 KV Son Ngr-Rihand | -33 | -28 | 0 | 0 | 0.00 | 0.78 | -0.78 |
| 132 KV Garhwa-Rihand | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 765 KV Sasaram - Fatehpur | -157 | -55 | 116 | 163 | 0.00 | 0.74 | -0.74 |
| 400 KV Barh -GKP (D/C) | 520 | 462 | 604 | 0 | 11.85 | 0.00 | 11.85 |
| 400 kV B'Sharif - Varanasi (D/C) | 125 | -40 | 149 | 151 | 0.54 | 0.00 | 0.54 |
| **Sub Total ER** | **1818** | **2562** | | | **67.37** | **2.03** | **65.35** |
| +/- 800 KV BiswanathCharialli-Agra | -500 | -500 | 0 | 500.00 | 0.00 | 12.03 | -12.03 |
| **Sub Total NER** | **-500** | **-500** | | | **0.00** | **12.03** | **-12.03** |
| **Total IR Exch** | **7031** | **7048** | | | **225.44** | **27.47** | **197.97** |

**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 |
| 42.51 | 0.36 | 42.87 | -1.80 | -4.57 | 16.15 | 0.00 | 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 |
| 57.22 | 139.40 | 196.61 | 53.32 | 144.65 | 197.97 | -3.90 | 5.26 | 1.36 |

**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 | -39 | -37 | 0 | 39 | 0 | 1 | -0.88 |

**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 | 0.00 | 5.63 | 48.04 | 70.94 | 18.15 | 5.59 | 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) | |
| 50.18 | 6.02 | 49.82 | 16.24 | 50.00 | 0.040 | 0.063 | 50.10 | 49.89 | 29.06 |

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

| Station | Voltage Level (kV) | Maximum | | Minimum | | Voltage (in % of Time) | | | | Voltage Deviat |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Voltage(KV) | Time | Voltage (KV) | Time | <380 kV | <390 kV | >420 kV | >430 kV | |
| Rihand | 400 | 409 | 3:00 | 398 | 11:34 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Gorakhpur | 400 | 422 | 3:03 | 406 | 7:36 | 0.0 | 0.0 | 1.2 | 0.0 | 1.2 |
| Bareilly(PG)400kV | 400 | 420 | 3:00 | 399 | 7:48 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kanpur | 400 | 418 | 3:00 | 399 | 14:41 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dadri | 400 | 428 | 3:03 | 402 | 14:35 | 0.0 | 0.0 | 22.3 | 0.0 | 22.3 |
| Ballabhgarh | 400 | 432 | 3:00 | 350 | 10:37 | 33.5 | 33.5 | 22.9 | 6.4 | 56.4 |
| Bawana | 400 | 428 | 3:00 | 401 | 14:37 | 0.0 | 0.0 | 23.1 | 0.0 | 23.1 |
| Bassi | 400 | 423 | 4:00 | 394 | 6:10 | 0.0 | 0.0 | 4.3 | 0.0 | 4.3 |
| Hissar | 400 | 423 | 3:01 | 397 | 14:36 | 0.0 | 0.0 | 10.8 | 0.0 | 10.8 |
| Moga | 400 | 422 | 23:42 | 400 | 14:20 | 0.0 | 0.0 | 2.6 | 0.0 | 2.6 |
| Abdullapur | 400 | 427 | 3:01 | 404 | 14:37 | 0.0 | 0.0 | 24.9 | 0.0 | 24.9 |
| Nalagarh | 400 | 430 | 2:06 | 409 | 14:31 | 0.0 | 0.0 | 41.3 | 0.0 | 41.3 |
| Kishenpur | 400 | 420 | 22:00 | 394 | 14:36 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Wagoora | 400 | 404 | 12:51 | 369 | 14:25 | 17.3 | 71.5 | 0.0 | 0.0 | 17.3 |
| Amritsar | 400 | 424 | 23:38 | 401 | 14:37 | 0.0 | 0.0 | 15.7 | 0.0 | 15.7 |
| Kashipur | 400 | 0 | 0:00 | 0 | 0:00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Hamirpur | 400 | 422 | 3:06 | 406 | 7:20 | 0.0 | 0.0 | 3.1 | 0.0 | 3.1 |
| Rishikesh | 400 | 423 | 3:03 | 394 | 7:48 | 0.0 | 0.0 | 12.7 | 0.0 | 12.7 |

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

| Station | Voltage Level (kV) | Maximum | | Minimum | | Voltage (in % of Time) | | | | Voltage Deviat |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Voltage(KV) | Time | Voltage (KV) | Time | <728 kV | <742 kV | >800 kV | >820 kV | |
| Fatehpur | 765 | 779 | 23:47 | 738 | 6:10 | 0.0 | 2.9 | 0.0 | 0.0 | 0.0 |
| Balia | 765 | 790 | 3:03 | 761 | 10:08 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Moga | 765 | 803 | 23:46 | 760 | 14:36 | 0.0 | 0.0 | 1.3 | 0.0 | 1.3 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Agra | 765 | 790 | 0:43 | 747 | 6:12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bhiwani | 765 | 803 | 23:32 | 771 | 16:25 | 0.0 | 0.0 | 1.9 | 0.0 | 1.9 |
| Unnao | 765 | 776 | 3:03 | 741 | 7:36 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 |
| Lucknow | 765 | 803 | 3:02 | 769 | 7:37 | 0.0 | 0.0 | 5.0 | 0.0 | 5.0 |
| Meerut | 765 | 806 | 19:46 | 760 | 5:56 | 40.3 | 40.3 | 7.3 | 0.0 | 47.6 |
| Jhatikara | 765 | 808 | 3:03 | 761 | 14:35 | 0.0 | 0.0 | 16.8 | 0.0 | 16.8 |
| Bareilly 765 kV | 765 | 802 | 3:03 | 763 | 8:17 | 0.0 | 0.0 | 1.9 | 0.0 | 1.9 |
| Anta | 765 | 786 | 0:46 | 756 | 6:10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Phagi | 765 | 798 | 3:02 | 756 | 6:13 | 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 | 483.24 | 536.06 | 496.81 | 971.87 | 146.82 | 422.49 |
| Pong | 426.72 | 384.05 | 405.46 | 352.07 | 406.83 | 397.88 | 44.71 | 280.00 |
| Tehri | 829.79 | 740.04 | 798.20 | 579.50 | 791.45 | 474.80 | 15.31 | 215.00 |
| Koteshwar | 612.50 | 598.50 | 610.26 | 4.95 | 610.80 | 4.95 | 215.00 | 214.52 |
| Chamera-I | 760.00 | 748.75 | 758.76 | 0.00 | 0.00 | 0.00 | 45.18 | 47.82 |
| 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 | 502.67 | 1.59 | 496.02 | 0.91 | 60.10 | 86.14 |

*** 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** | -537 | 2 | 0 | -610 | -398 | 0 | -18.23 | -0.59 | -18.82 |
| **Delhi** | -92 | -554 | 0 | -273 | 154 | 0 | -3.80 | 0.67 | -3.13 |
| **Haryana** | -834 | 328 | 0 | -504 | 250 | 0 | -14.74 | 5.21 | -9.53 |
| **HP** | 466 | 78 | 0 | 355 | -10 | 0 | 12.03 | -0.63 | 11.41 |
| **J&K** | 619 | 0 | 0 | 616 | 330 | 0 | 14.67 | 4.70 | 19.37 |
| **CHD** | 0 | 0 | 0 | 0 | 20 | 0 | 0.00 | 0.45 | 0.45 |
| **Rajasthan** | 31 | 271 | 0 | -7 | -531 | 0 | 10.12 | -0.06 | 10.06 |
| **UP** | 114 | 0 | 0 | -107 | -100 | 0 | -7.44 | -1.71 | -9.14 |
| **Uttarakhand** | 316 | 143 | 0 | 0 | 647 | 0 | 3.18 | 10.33 | 13.50 |
| **Total** | **82** | **269** | **0** | **-530** | **359** | **0** | **-4.20** | **18.37** | **14.17** |

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

| State | Bilateral (MW) | | IEX (MW) | | PXIL (MW) | |
|---|---|---|---|---|---|---|
| | Maximum | Minimum | Maximum | Minimum | Maximum | Minimum |
| **Punjab** | -527 | -1248 | 2 | -398 | 0 | 0 |
| **Delhi** | -14 | -285 | 741 | -558 | 0 | 0 |
| **Haryana** | -504 | -834 | 329 | -354 | 0 | 0 |
| **HP** | 707 | 341 | 111 | -534 | 0 | 0 |
| **J&K** | 619 | 601 | 344 | -15 | 0 | 0 |
| **CHD** | 0 | 0 | 54 | 0 | 0 | 0 |
| **Rajasthan** | 1180 | -7 | 272 | -1327 | 0 | 0 |
| **UP** | 155 | -861 | 0 | -100 | 0 | 0 |
| **Uttarakhand** | 316 | 0 | 794 | 142 | 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** | **3.13%** |
| **ER** | **0.00%** |
| **Simultaneous** | **0.35%** |

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

| | |
|---|---|
| **WR** | **21.53%** |
| **ER** | **0.00%** |
| **Simultaneous** | **25.35%** |

(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 | 1 | 14 |
| Haryana | 1 | 14 |
| Rajasthan | 1 | 16 |
| Delhi | 4 | 23 |
| UP | 1 | 13 |
| Uttarakhand | 3 | 27 |
| HP | 3 | 28 |
| J & K | 3 | 15 |
| Chandigarh | 3 | 37 |

**XIII.System Constraints:**

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

**XV. Weather Conditions For 24.01.2017 :**

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

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

220kV bays 207,212 have been successfully charged on no load at Baghpat (PGCIL) substation. (Bay 207 at 16.07hrs & bay 212 at 16.16hrs ).

**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 : 24.01.2017**

**पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**