

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(भारत सरकार का उद्यम)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 12.01.2017

Date of Reporting : 13.01.2017



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 |
| 42347 | 1770 | 44117 | 49.98 | 30328 | 433 | 30761 | 49.99 | 883.79 | 22.81 |

* 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 | 54.28 | 6.86 | 0.37 | 61.51 | 39.28 | 40.15 | 0.86 | 101.66 | 0.00 |
| Haryana | 54.57 | 0.37 | 0.00 | 54.94 | 66.57 | 66.30 | -0.27 | 121.24 | 0.00 |
| Rajasthan | 114.77 | 4.25 | 7.54 | 126.56 | 71.56 | 76.81 | 5.25 | 203.37 | 5.43 |
| Delhi | 12.27 | | 0.00 | 12.27 | 51.40 | 53.04 | 1.64 | 65.32 | 0.04 |
| UP | 189.92 | 7.25 | 0.00 | 197.17 | 86.84 | 87.75 | 0.91 | 284.92 | 3.49 |
| Uttarakhand | | 8.80 | 0.00 | 11.27 | 21.55 | 22.60 | 1.05 | 33.87 | 2.54 |
| HP | | 3.66 | 1.07 | 3.66 | 21.09 | 22.04 | 0.96 | 25.70 | 0.36 |
| J & K | | 3.66 | 0.00 | 3.66 | 38.70 | 40.17 | 1.47 | 43.83 | 10.96 |
| Chandigarh | | | | 0.00 | 3.81 | 3.89 | 0.08 | 3.89 | 0.00 |
| Total | 425.82 | 34.83 | 8.98 | 471.04 | 400.81 | 412.75 | 11.95 | 883.79 | 22.81 |

* Shortage furnished by the respective constituent's 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 | 5495 | 0 | -154 | -829 | 3085 | 0 | 83 | -546 | 5495 | 19:00 | 0 |
| Haryana | 6682 | 0 | -44 | -176 | 3414 | 0 | 89 | -471 | 6682 | 19:00 | 0 |
| Rajasthan | 8295 | 848 | 179 | 436 | 7885 | 0 | 232 | 485 | 9594 | 8:00 | 0 |
| Delhi | 3276 | 0 | 25 | -62 | 1441 | 0 | 5 | -722 | 3851 | 11:00 | 3 |
| UP | 13314 | 320 | 147 | -218 | 10746 | 0 | 30 | 98 | 13314 | 19:00 | 320 |
| Uttarakhand | 1762 | 75 | -21 | 127 | 1254 | 0 | 88 | 451 | 1855 | 8:00 | 70 |
| HP | 1269 | 15 | -77 | 382 | 737 | 15 | -4 | 493 | 1422 | 10:00 | 15 |
| J&K | 2049 | 512 | 8 | 812 | 1673 | 418 | 62 | 840 | 2049 | 19:00 | 512 |
| Chandigarh | 204 | 0 | -7 | 0 | 93 | 0 | -2 | 0 | 232 | 9:00 | 0 |
| Total | 42347 | 1770 | 57 | 472 | 30328 | 433 | 582 | 629 | 42347 | 19:00 | 1770 |

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

Diversity is 1.05

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

III. Regional Entities :

| Station/ Constituent | Inst. Capacity (Effective) MW | Declared Capacity(MW) | Peak MW | Off Peak MW | Energy | Average | Schedule | UI |
|---|----------------------------------|--------------------------|--------------|-------------|---------------|-------------|---------------|--------------|
| | | | (Gross) | (Gross) | (Net MU) | Sentout(MW) | Net MU | Net MU |
| A. NTPC | | | | | | | | |
| Singrauli STPS (5*200+2*500) | 2000 | 1890 | 2034 | 1888 | 44.84 | 1868 | 44.54 | 0.30 |
| Rihand I STPS (2*500) | 1000 | 947 | 1000 | 762 | 21.24 | 885 | 21.32 | -0.09 |
| Rihand II STPS (2*500) | 1000 | 950 | 1003 | 738 | 21.56 | 899 | 21.49 | 0.07 |
| Rihand III STPS (2*500) | 1000 | 950 | 1022 | 736 | 21.76 | 907 | 21.80 | -0.04 |
| Dadri I STPS (4*210) | 840 | 815 | 160 | 157 | 4.35 | 181 | 4.61 | -0.27 |
| Dadri II STPS (2*490) | 980 | 980 | 350 | 345 | 10.14 | 422 | 10.86 | -0.72 |
| Unchahar I TPS (2*210) | 420 | 407 | 408 | 274 | 8.07 | 336 | 8.84 | -0.76 |
| Unchahar II TPS (2*210) | 420 | 405 | 409 | 299 | 8.08 | 337 | 8.66 | -0.58 |
| Unchahar III TPS (1*210) | 210 | 203 | 198 | 139 | 3.92 | 163 | 4.38 | -0.47 |
| ISTPP (Jhajjar) (3*500) | 1500 | 1440 | 0 | 0 | 0.00 | 0 | 0.00 | 0.00 |
| Dadri GPS (4*130.19+2*154.51) | 830 | 804 | 142 | 141 | 3.60 | 150 | 4.03 | -0.43 |
| Anta GPS (3*88.71+1*153.2) | 419 | 417 | 0 | 0 | 0.00 | 0 | 0.00 | 0.00 |
| Auraiya GPS (4*111.19+2*109.30) | 663 | 637 | 0 | 0 | 0.00 | 0 | 0.00 | 0.00 |
| Dadri Solar(5) | 5 | 1 | 0 | 0 | 0.01 | 1 | 0.02 | 0.00 |
| Unchahar Solar(10) | 10 | 2 | 0 | 0 | 0.04 | 2 | 0.04 | 0.00 |
| Singrauli Solar(15) | 15 | 2 | 0 | 0 | 0.06 | 2 | 0.06 | 0.00 |
| KHEP(4*200) | 800 | 870 | 633 | 0 | 2.60 | 108 | 2.61 | -0.01 |
| Sub Total (A) | 12112 | 11720 | 7359 | 5479 | 150 | 6262 | 153 | -2.99 |
| B. NPC | | | | | | | | |
| NAPS (2*220) | 440 | 418 | 461 | 464 | 10.13 | 422 | 10.03 | 0.10 |
| RAPS- B (2*220) | 440 | 244 | 222 | 219 | 4.40 | 183 | 5.86 | -1.47 |
| RAPS- C (2*220) | 440 | 220 | 240 | 240 | 5.06 | 211 | 5.28 | -0.22 |
| Sub Total (B) | 1320 | 882 | 923 | 923 | 19.59 | 816 | 21.17 | -1.58 |
| C. NHPC | | | | | | | | |
| Chamera I HPS (3*180) | 540 | 540 | 541 | 0 | 1.80 | 75 | 1.62 | 0.18 |
| Chamera II HPS (3*100) | 300 | 301 | 310 | 0 | 1.05 | 44 | 0.93 | 0.12 |
| Chamera III HPS (3*77) | 231 | 167 | 158 | 0 | 0.52 | 22 | 0.50 | 0.02 |
| Bairasuli HPS(3*60) | 180 | 179 | 119 | 0 | 0.47 | 19 | 0.46 | 0.01 |
| Salal-HPS (6*115) | 690 | 72 | 230 | 70 | 2.07 | 86 | 1.72 | 0.35 |
| Tanakpur-HPS (3*31.4) | 94 | 21 | 21 | 22 | 0.57 | 24 | 0.50 | 0.07 |
| Uri-I HPS (4*120) | 480 | 115 | 233 | 75 | 2.96 | 123 | 2.75 | 0.21 |
| Uri-II HPS (4*60) | 240 | 77 | 120 | 80 | 1.90 | 79 | 1.85 | 0.05 |
| Dhauliganga-HPS (4*70) | 280 | 210 | 215 | 0 | 0.86 | 36 | 0.81 | 0.06 |
| Dulhasti-HPS (3*130) | 390 | 257 | 267 | 0 | 2.37 | 99 | 2.20 | 0.17 |
| Sewa-II HPS (3*40) | 120 | 119 | 13 | 0 | 0.29 | 12 | 0.37 | -0.07 |
| Parbati 3 (4*130) | 520 | 130 | 131 | 0 | 0.33 | 14 | 0.29 | 0.04 |
| Sub Total (C) | 4065 | 2187 | 2357 | 247 | 15 | 632 | 14 | 1.19 |
| D.SJVNL | | | | | | | | |
| NJPC (6*250) | 1500 | 1615 | 1613 | 0 | 6.63 | 276 | 6.49 | 0.14 |
| Rampur HEP (6*88.67) | 412 | 442 | 443 | 0 | 1.86 | 77 | 1.80 | 0.05 |
| Sub Total (D) | 1912 | 2057 | 2056 | 0 | 8.49 | 354 | 8.29 | 0.19 |
| E. THDC | | | | | | | | |
| Tehri HPS (4*250) | 1000 | 988 | 958 | 0 | 8.65 | 360 | 8.60 | 0.05 |
| Koteshwar HPS (4*100) | 400 | 128 | 396 | 71 | 3.11 | 130 | 3.06 | 0.05 |
| Sub Total (E) | 1400 | 1116 | 1354 | 71 | 11.76 | 490 | 11.66 | 0.10 |
| F. BBMB | | | | | | | | |
| Bhakra HPS (2*108+3*126+5*157) | 1379 | 513 | 936 | 399 | 12.87 | 536 | 12.30 | 0.56 |
| Dehar HPS (6*165) | 990 | 115 | 495 | 0 | 2.77 | 115 | 2.76 | 0.00 |
| Pong HPS (6*66) | 396 | 146 | 396 | 0 | 3.57 | 149 | 3.51 | 0.06 |
| Sub Total (F) | 2765 | 774 | 1827 | 399 | 19.20 | 800 | 18.58 | 0.62 |
| G. IPP(s)/JV(s) | | | | | | | | |
| ALLAIN DUHANGAN HPS(IPP) (2*96) | 192 | 0 | 0 | 0 | 0.37 | 16 | 0.36 | 0.02 |
| KARCHAM WANGTOO HPS(IPP) (4*250) | 1000 | 0 | 630 | 0 | 3.44 | 143 | 3.56 | -0.12 |
| Malana Stg-II HPS (2*50) | 100 | 0 | 0 | 0 | 0.19 | 8 | 0.18 | 0.01 |
| Shree Cement TPS (2*150) | 300 | 0 | 142 | 115 | 3.01 | 125 | 2.95 | 0.06 |
| Budhil HPS(IPP) (2*35) | 70 | 0 | 0 | 0 | 0.00 | 0 | 0.15 | -0.15 |
| Sub Total (G) | 1662 | 0 | 772 | 115 | 7.01 | 292 | 7.20 | -0.19 |
| H. Total Regional Entities (A-G) | 25237 | 18736 | 16648 | 7235 | 231.50 | 9646 | 234.16 | -2.66 |

| 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 | -0.14 | -6 |
| | 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 | 182 | 202 | 4.67 | 195 |
| | Goidwal(GVK) (2*270) | 540 | 0 | 0 | -0.03 | -1 |

| | | | | | | |
|--|---|----------------------------------|-------------|--------------|---------------|-------------|
| | Rajpura (2*700) | 1400 | 1320 | 660 | 27.37 | 1141 |
| | Talwandi Saboo (3*660) | 1980 | 1000 | 616 | 22.42 | 934 |
| | Thermal (Total) | 6560 | 2502 | 1478 | 54.28 | 2262 |
| | Total Hydro | 1000 | 370 | 196 | 6.86 | 286 |
| | Wind Power | 0 | 0 | 0 | 0.00 | 0 |
| | Biomass | 288 | 0 | 0 | 0.31 | 13 |
| | Solar | 560 | 0 | 0 | 0.06 | 3 |
| | Renewable(Total) | 848 | 0 | 0 | 0.37 | 16 |
| | Total Punjab | 8408 | 2872 | 1674 | 61.51 | 2563 |
| Haryana | Panipat TPS (2*210+2*250) | 920 | 0 | 0 | 0.00 | 0 |
| | DCRTPP (Yamuna nagar) (2*300) | 600 | 461 | 465 | 11.10 | 463 |
| | Faridabad GPS (NTPC)(2*137.75+1*156) | 432 | 0 | 0 | 0.00 | 0 |
| | RGTPP (khedar) (IPP) (2*600) | 1200 | 1160 | 738 | 22.93 | 956 |
| | Magnum Diesel (IPP) | 25 | 0 | 0 | 0.00 | 0 |
| | Jhajjar(CLP) (2*660) | 1320 | 1122 | 741 | 20.54 | 856 |
| | Thermal (Total) | 4497 | 2743 | 1944 | 54.57 | 2274 |
| | Total Hydro | 62 | 15 | 10 | 0.37 | 15 |
| | 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 | 2758 | 1954 | 54.94 | 2289 |
| Rajasthan | kota TPS (2*110+2*195+3*210) | 1240 | 1162 | 940 | 26.36 | 1098 |
| | suratgarh TPS (6*250) | 1500 | 219 | 184 | 5.17 | 216 |
| | Chabra TPS (4*250) | 1000 | 0 | 827 | 15.96 | 665 |
| | 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 | 149 | 158 | 3.80 | 158 |
| | RAPS A (NPC) (1*100+1*200) | 300 | 190 | 190 | 4.29 | 179 |
| | Barsingar (NLC) (2*125) | 250 | 113 | 78 | 2.29 | 95 |
| | Giral LTPS (2*125) | 250 | 0 | 0 | 0.00 | 0 |
| | Rajwest LTPS (IPP) (8*135) | 1080 | 829 | 950 | 20.67 | 861 |
| | VS LIGNITE LTPS (IPP) (1*135) | 135 | 0 | 0 | 0.00 | 0 |
| | Kalisindh Thermal(2*600) | 1200 | 1137 | 906 | 25.39 | 1058 |
| | Kawai(Adani) (2*660) | 1320 | 433 | 434 | 10.84 | 452 |
| | Thermal (Total) | 8876 | 4232 | 4667 | 114.77 | 4782 |
| | Total Hydro | 550 | 152 | 173 | 4.25 | 177 |
| | Wind power | 4017 | 146 | 315 | 7.22 | 301 |
| | Biomass | 99 | 13 | 13 | 0.32 | 13 |
| | Solar | 1295 | 0 | 0 | 0.00 | 0 |
| | Renewable/Others (Total) | 5411 | 159 | 328 | 7.54 | 314 |
| | Total Rajasthan | 14837 | 4543 | 5168 | 126.56 | 5273 |
| UP | Anpara TPS (3*210+2*500) | 1630 | 1376 | 1078 | 31.92 | 1330 |
| | Obra TPS (2*50+2*94+5*200) | 1194 | 463 | 443 | 11.50 | 479 |
| | Paricha TPS (2*110+2*220+2*250) | 1160 | 496 | 666 | 16.00 | 667 |
| | Panki TPS (2*105) | 210 | 135 | 135 | 3.40 | 142 |
| | Harduaqanj TPS (1*60+1*105+2*250) | 665 | 414 | 411 | 11.50 | 479 |
| | Tanda TPS (NTPC) (4*110) | 440 | 385 | 290 | 8.30 | 346 |
| | Roza TPS (IPP) (4*300) | 1200 | 1089 | 756 | 23.61 | 984 |
| | Anpara-C (IPP) (2*600) | 1200 | 1070 | 635 | 22.80 | 950 |
| | Bajaj Energy Pvt.Ltd(IPP) TPS (10*45) | 450 | 194 | 194 | 5.75 | 240 |
| | Anpara-D(2*500) | 1000 | 587 | 573 | 14.35 | 598 |
| | Lalitpur TPS(3*660) | 1980 | 0 | 0 | 0.00 | 0 |
| | Bara(2*660) | 1320 | 881 | 730 | 20.40 | 850 |
| | Thermal (Total) | 12449 | 7090 | 5911 | 169.52 | 7063 |
| | Vishnuparyag HPS (IPP)(4*110) | 440 | 73 | 73 | 1.80 | 75 |
| | Alakanada(4*82.5) | 330 | 76 | 0 | 1.11 | 46 |
| | Other Hydro | 527 | 95 | 147 | 4.34 | 181 |
| | 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 | 8184 | 6981 | 197.17 | 8215 |
| | Uttarakhand | Other Hydro | 1250 | 572 | 282 | 8.80 |
| Total Gas | | 225 | 100 | 104 | 2.42 | 101 |
| 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 | 672 | 386 | 11.27 | 469 |
| Delhi | Rajghat TPS (2*67.5) | 135 | 0 | 0 | -0.01 | 0 |
| | Delhi Gas Turbine (6x30 + 3x34) | 282 | 74 | 74 | 1.88 | 78 |
| | Pragati Gas Turbine (2x104+ 1x122) | 330 | 159 | 157 | 3.72 | 155 |
| | Rithala GPS (3*36) | 95 | 0 | 0 | 0.00 | 0 |
| | Bawana GPS (4*216+2*253) | 1370 | 279 | 280 | 6.86 | 286 |
| | Badarpur TPS (NTPC) (3*95+2*210) | 705 | -4 | -4 | -0.17 | -7 |
| | Thermal (Total) | 2917 | 508 | 507 | 12.27 | 511 |
| | 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 | 508 | 507 | 12.27 | 511 | |
| HP | Baspa HPS (IPP) (3*100) | 300 | 0 | 0 | 0.84 | 35 |
| | Malana HPS (IPP) (2*43) | 86 | 0 | 0 | 0.18 | 7 |
| | Other Hydro | 372 | 77 | 43 | 1.57 | 66 |
| | 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 | 54 | 39 | 1.07 | 45 |
| | Renewable(Total) | 486 | 54 | 39 | 1.07 | 45 |
| | Total HP | 1244 | 131 | 82 | 3.66 | 152 |
| | J & K | Baqilhar HPS (IPP) (3*150+3*150) | 900 | 113 | 113 | 2.71 |
| Other Hydro/IPP(including 98 MW Small Hydro) | | 308 | 80 | 18 | 0.95 | 40 |
| 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 | 193 | 131 | 4 | 153 |

| | | | | | |
|--|--------------|--------------|--------------|---------------|--------------|
| Total State Control Area Generation | 50078 | 19862 | 16883 | 471.04 | 19626 |
| J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)] | | 8036 | 8358 | 197.22 | 8217 |
| Total Regional Availability(Gross) | 75315 | 44546 | 32475 | 899.75 | 37490 |

IV. Total Hydro Generation:

| | | | | | |
|-----------------------------|--------------|--------------|-------------|--------------|-------------|
| Regional Entities Hydro | 12234 | 8857 | 717 | 61.22 | 2551 |
| State Control Area Hydro | 7163 | 1777 | 1198 | 34.83 | 1554 |
| Total Regional Hydro | 19397 | 10634 | 1915 | 96.06 | 4105 |

V. Total Renewable Generation:

| | | | | | |
|---------------------------------|-------------|------------|------------|-------------|------------|
| Regional Entities Renewable | 30 | 0 | 0 | 0.12 | 5 |
| State Control Area Renewable | 7356 | 213 | 367 | 9.03 | 376 |
| Total Regional Renewable | 7386 | 213 | 367 | 9.14 | 381 |

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

| Element | Peak(19:00 Hrs) MW | Off Peak(03:00 Hrs) MW | Maximum Interchange (MW) | | Energy (MU) | | Net Energy MU |
|-----------------------------------|-----------------------|---------------------------|--------------------------|--------|---------------|--------------|------------------|
| | | | Import | Export | Import | Export | |
| Vindhychal(HVDC B/B) | -200 | -300 | 50 | 500 | 0.13 | 5.78 | -5.65 |
| 765 KV Gwalior-Agra (D/C) | 2295 | 2313 | 3004 | 0 | 59.83 | 0.00 | 59.83 |
| 400 KV Zerda-Kankroli | 29 | -128 | 82 | 130 | 0.00 | 0.73 | -0.73 |
| 400 KV Zerda-Bhimnal | 128 | -31 | 240 | 58 | 1.69 | 0.00 | 1.69 |
| 220 KV Auraiya-Malanpur | -74 | -50 | 0 | 81 | 0.00 | 1.43 | -1.43 |
| 220 KV Badod-Kota/Morak | -30 | -4 | 57 | 55 | 0.10 | 0.00 | 0.10 |
| Mundra-Mohinderghar(HVDC Bipole) | 2502 | 2098 | 2514 | 0.00 | 58.80 | 0.00 | 58.80 |
| 400 KV RAPP-C-Sujalpur | 427 | 360 | 469 | 0 | 9.28 | 0.00 | 9.28 |
| 400 KV Vindhychal-Rihand | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 765 kV Phagi-Gwalior (D/C) | 1075 | 1258 | 1546 | 0 | 32.56 | 0.00 | 32.56 |
| Sub Total WR | 6152 | 5516 | | | 162.39 | 7.94 | 154.45 |
| 400 kV Sasaram - Varanasi | -211 | 32 | 268 | 78 | 1.59 | 0.00 | 1.59 |
| 400 kV Sasaram - Allahabad | -29 | 136 | 45 | 191 | 0.00 | 1.68 | -1.68 |
| 400 KV MZP- GKP (D/C) | -6 | 250 | 270 | 6 | 4.17 | 0.00 | 4.17 |
| 400 KV Patna-Balia(D/C) X 2 | 545 | 643 | 737 | 0 | 14.47 | 0.00 | 14.47 |
| 400 KV B'Sharif-Balia (D/C) | -22 | 102 | 192 | 22 | 2.36 | 0.00 | 2.36 |
| 765 KV Gaya-Balia | 187 | 218 | 300 | 0 | 5.61 | 0.00 | 5.61 |
| 765 KV Gaya-Varanasi (D/C) | 441 | 410 | 784 | 0 | 13.06 | 0.00 | 13.06 |
| 220 KV Pusaali-Sahupuri | 89 | 86 | 144 | 0 | 2.48 | 0.00 | 2.48 |
| 132 KV K'nasa-Sahupuri | 0 | 0 | 0 | 0 | 0.96 | 0.51 | -0.51 |
| 132 KV Son Ngr-Rihand | -30 | -24 | 0 | 30 | 0.00 | 0.57 | -0.57 |
| 132 KV Garhwa-Rihand | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 765 KV Sasaram - Fatehpur | -117 | 83 | 253 | 117 | 1.80 | 0.00 | 1.80 |
| 400 KV Barh -GKP (D/C) | 462 | 462 | 516 | 0 | 11.25 | 0.00 | 11.25 |
| 400 kV B'Sharif - Varanasi (D/C) | 75 | -56 | 175 | 89 | 1.25 | 0.00 | 1.25 |
| Sub Total ER | 1384 | 2342 | | | 59.00 | 2.76 | 55.28 |
| +/- 800 KV BiswanathChariali-Agra | 500 | 500 | 0 | 500.00 | 0.00 | 12.51 | -12.51 |
| Sub Total NER | 500 | 500 | | | 0.00 | 12.51 | -12.51 |
| Total IR Exch | 8036 | 8358 | | | 221.39 | 23.21 | 197.22 |

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 |
| 37.27 | 0.42 | 37.69 | 0.93 | -5.25 | 26.99 | 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 |
| 65.60 | 139.16 | 204.76 | 42.77 | 154.45 | 197.22 | -22.84 | 15.29 | -7.54 |

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

| Element | Peak(19:00 Hrs) MW | Off Peak(03:00 Hrs) MW | Maximum Interchange (MW) | | Energy (MU) | | Net Energy MU |
|---------------------------------|-----------------------|---------------------------|--------------------------|--------|-------------|--------|------------------|
| | | | Import | Export | Import | Export | |
| 132 KV Tanakpur - Mahendarnagar | -35 | -42 | 0 | 44 | 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 | 0.05 | 8.36 | 58.14 | 71.74 | 16.44 | 4.48 | 0.27 | 0.00 |

| ----- Frequency (Hz) -----> | | | | Average Frequency | Frequency Variation | Std. Dev. | Frequency in 15 Min Block | | Freq Dev Index (% of Time) |
|-----------------------------|------|---------|-------|----------------------|------------------------|-----------|---------------------------|------|----------------------------------|
| Maximum | | Minimum | | | | | MAX | MIN | |
| Freq | Time | Freq | Time | Hz | Index | (Hz) | (Hz) | | |
| 50.26 | 6.02 | 49.80 | 16.12 | 50.00 | 0.044 | 0.066 | 0.00 | 0.00 | 28.26 |

VIII(A). Voltage profile 400 kV

| Station | Voltage Level (kV) | Maximum | | Minimum | | Voltage (in % of Time) | | | | Volta ge Deviat |
|-------------------|--------------------|-------------|-------|--------------|-------|------------------------|---------|---------|---------|-----------------------|
| | | Voltage(KV) | Time | Voltage (KV) | Time | <380 kV | <390 kV | >420 kV | >430 kV | |
| Rihand | 400 | 407 | 1:03 | 397 | 7:41 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Gorakhpur | 400 | 418 | 4:01 | 400 | 9:40 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bareilly(PG)400kV | 400 | 421 | 0:59 | 397 | 9:47 | 0.0 | 0.0 | 1.2 | 0.0 | 1.2 |
| Kanpur | 400 | 417 | 0:59 | 395 | 9:37 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dadri | 400 | 427 | 3:59 | 401 | 9:38 | 0.0 | 0.0 | 22.2 | 0.0 | 22.2 |
| Ballabgarh | 400 | 430 | 4:00 | 404 | 9:37 | 0.0 | 0.0 | 33.0 | 0.0 | 33.0 |
| Bawana | 400 | 425 | 3:44 | 401 | 9:38 | 0.0 | 0.0 | 19.7 | 0.0 | 19.7 |
| Bassi | 400 | 425 | 4:00 | 396 | 9:35 | 0.0 | 0.0 | 2.3 | 0.0 | 2.3 |
| Hissar | 400 | 423 | 4:03 | 397 | 12:43 | 0.0 | 0.0 | 1.4 | 0.0 | 1.4 |
| Moga | 400 | 415 | 19:38 | 402 | 12:15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Abdullapur | 400 | 427 | 3:03 | 405 | 12:15 | 0.0 | 0.0 | 27.6 | 0.0 | 27.6 |
| Nalagarh | 400 | 430 | 3:12 | 412 | 12:16 | 0.0 | 0.0 | 39.4 | 0.0 | 39.4 |
| Kishenpur | 400 | 419 | 2:28 | 397 | 12:14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Wagoora | 400 | 412 | 17:49 | 367 | 10:34 | 36.3 | 85.6 | 0.0 | 0.0 | 36.3 |
| Amritsar | 400 | 429 | 3:07 | 406 | 12:14 | 0.0 | 0.0 | 33.8 | 0.0 | 33.8 |
| Kashipur | 400 | 0 | 0:00 | 0 | 0:00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Hamirpur | 400 | 424 | 2:27 | 413 | 5:49 | 0.0 | 0.0 | 22.5 | 0.0 | 22.5 |
| Rishikesh | 400 | 422 | 4:00 | 391 | 9:42 | 0.0 | 0.0 | 4.4 | 0.0 | 4.4 |

VIII(B). Voltage profile 765 kV

| Station | Voltage Level (kV) | Maximum | | Minimum | | Voltage (in % of Time) | | | | Volta ge Deviat |
|----------|--------------------|-------------|-------|--------------|------|------------------------|---------|---------|---------|-----------------------|
| | | Voltage(KV) | Time | Voltage (KV) | Time | <728 kV | <742 kV | >800 kV | >820 kV | |
| Fatehpur | 765 | 772 | 20:28 | 734 | 9:47 | 0.0 | 4.3 | 0.0 | 0.0 | 0.0 |
| Balia | 765 | 787 | 4:02 | 749 | 9:47 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Moga | 765 | 792 | 19:43 | 764 | 9:38 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| | | | | | | | | | | |
|-----------------|-----|-----|-------|-----|------|-----|------|------|-----|------|
| Agra | 765 | 788 | 4:01 | 746 | 9:38 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bhiwani | 765 | 809 | 3:04 | 763 | 9:38 | 0.0 | 0.0 | 20.6 | 0.0 | 20.6 |
| Unnao | 765 | 775 | 4:02 | 730 | 9:46 | 0.0 | 23.9 | 0.0 | 0.0 | 0.0 |
| Lucknow | 765 | 800 | 4:00 | 758 | 9:47 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Meerut | 765 | 807 | 20:26 | 762 | 9:38 | 0.0 | 0.0 | 11.6 | 0.0 | 11.6 |
| Jhatikara | 765 | 806 | 4:01 | 758 | 9:38 | 0.0 | 0.0 | 10.5 | 0.0 | 10.5 |
| Bareilly 765 kV | 765 | 796 | 4:02 | 750 | 9:38 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anta | 765 | 796 | 3:58 | 758 | 9:33 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Phagi | 765 | 804 | 4:00 | 754 | 9:42 | 0.0 | 0.0 | 0.6 | 0.0 | 0.6 |

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

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 | 485.94 | 610.73 | 498.87 | 1053.16 | 161.92 | 388.08 |
| Pong | 426.72 | 384.05 | 406.85 | 397.88 | 409.08 | 464.36 | 66.15 | 241.12 |
| Tehri | 829.79 | 740.04 | 803.75 | 680.19 | 797.20 | 563.60 | 37.88 | 207.00 |
| Koteshwar | 612.50 | 598.50 | 610.43 | 4.79 | 610.85 | 5.00 | 207.00 | 205.07 |
| Chamera-I | 760.00 | 748.75 | 759.36 | 0.00 | 0.00 | 0.00 | 39.53 | 48.32 |
| 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 | 503.74 | 1.45 | 496.63 | 0.66 | 60.10 | 85.77 |

* 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 | -547 | 1 | 0 | -673 | -155 | 0 | -18.72 | -0.53 | -19.25 |
| Delhi | -94 | -628 | 0 | -276 | 214 | 0 | -3.83 | 0.68 | -3.15 |
| Haryana | -854 | 383 | 0 | -517 | 341 | 0 | -15.11 | 6.98 | -8.13 |
| HP | 430 | 64 | 0 | 403 | -21 | 0 | 11.75 | -0.75 | 11.00 |
| J&K | 608 | 232 | 0 | 605 | 207 | 0 | 15.41 | 4.98 | 20.39 |
| CHD | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.03 | 0.03 |
| Rajasthan | 7 | 478 | 0 | 12 | 424 | 0 | 7.76 | 12.20 | 19.96 |
| UP | 98 | 0 | 0 | -118 | -100 | 0 | -8.35 | -1.71 | -10.06 |
| Uttarakhand | 286 | 166 | 0 | 99 | 28 | 0 | 4.63 | 5.38 | 10.01 |
| Total | -66 | 696 | 0 | -466 | 938 | 0 | -6.45 | 27.25 | 20.80 |

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

| State | Bilateral (MW) | | IEX (MW) | | PXIL (MW) | |
|-------------|----------------|---------|----------|---------|-----------|---------|
| | Maximum | Minimum | Maximum | Minimum | Maximum | Minimum |
| Punjab | -537 | -1271 | 241 | -621 | 0 | 0 |
| Delhi | -22 | -289 | 762 | -648 | 0 | 0 |
| Haryana | -517 | -854 | 385 | -244 | 0 | 0 |
| HP | 690 | 274 | 137 | -430 | 0 | 0 |
| J&K | 742 | 590 | 458 | -108 | 0 | 0 |
| CHD | 0 | 0 | 38 | -36 | 0 | 0 |
| Rajasthan | 887 | 7 | 961 | 354 | 0 | 0 |
| UP | 155 | -956 | 0 | -100 | 0 | 0 |
| Uttarakhand | 286 | 76 | 436 | 16 | 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 | 2.43% |
| ER | 0.00% |
| Simultaneous | 0.00% |

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

| | |
|--------------|--------|
| WR | 17.01% |
| ER | 0.00% |
| Simultaneous | 0.69% |

(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 | 2 | 17 |
| Haryana | 1 | 15 |
| Rajasthan | 4 | 39 |
| Delhi | 7 | 58 |
| UP | 0 | 10 |
| Uttarakhand | 1 | 19 |
| HP | 3 | 30 |
| J & K | 5 | 35 |
| Chandigarh | 4 | 42 |

XIII. System Constraints:

XIV. Grid Disturbance / Any Other Significant Event:

XV. Weather Conditions For 12.01.2017 :

XVI. Synchronisation of new generating units :

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

0

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 : 12.01.2017

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER