

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(भारत सरकार का उद्यम)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 18.01.2017

Date of Reporting : 19.01.2017



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 |
| 44447 | 499 | 44946 | 49.98 | 30430 | 337 | 30767 | 49.99 | 898.09 | 12.25 |

* 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) | Shortages * (MU) |
|--------------|--|--------------|---------------------|---------------|--------------------------|------------------------|-------------|----------------------|------------------|
| | Thermal | Hydro | Renewable/others \$ | Total | | | | | |
| Punjab | 38.72 | 9.07 | 0.34 | 48.13 | 45.34 | 47.06 | 1.72 | 95.19 | 0.00 |
| Haryana | 55.79 | 0.45 | 0.00 | 56.24 | 64.80 | 64.84 | 0.05 | 121.08 | 0.00 |
| Rajasthan | 124.25 | 4.20 | 14.25 | 142.69 | 65.68 | 69.30 | 3.62 | 212.00 | 1.04 |
| Delhi | 11.07 | 0.00 | 0.00 | 11.07 | 56.00 | 57.49 | 1.49 | 68.55 | 0.04 |
| UP | 190.67 | 7.54 | 0.00 | 198.21 | 94.83 | 94.66 | -0.17 | 292.87 | 0.94 |
| Uttarakhand | | 8.82 | 0.00 | 14.65 | 21.73 | 21.42 | -0.31 | 36.06 | 0.00 |
| HP | | 4.79 | 0.97 | 4.79 | 21.27 | 22.42 | 1.15 | 27.21 | 0.00 |
| J & K | | 3.66 | 0.00 | 3.66 | 37.08 | 37.28 | 0.20 | 40.94 | 10.24 |
| Chandigarh | | | | 0.00 | 4.16 | 4.18 | 0.03 | 4.18 | 0.00 |
| Total | 420.49 | 38.53 | 15.57 | 479.44 | 410.88 | 418.65 | 7.77 | 898.09 | 12.25 |

* Shortage furnished by the respective constituent's 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 | | | | Maximum Demand Met (MW) and Time(Hrs) | Shortage (MW) | |
|--------------|-----------------------------|------------|-----------|---------------------|-------------------------|------------|------------|---------------------|---------------------------------------|---------------|------------|
| | Demand Met | Shortage | UI | STOA/PX transaction | Demand Met | Shortage | UI | STOA/PX transaction | | | |
| Punjab | 5225 | 0 | -36 | -618 | 3235 | 0 | 15 | -542 | 5225 | 19:00 | 0 |
| Haryana | 6631 | 0 | 39 | -399 | 3285 | 0 | 3 | -480 | 6631 | 19:00 | 0 |
| Rajasthan | 9536 | 0 | 18 | 208 | 7884 | 0 | 241 | 387 | 9803 | 9:00 | 0 |
| Delhi | 3334 | 0 | -63 | -66 | 1571 | 0 | 86 | -682 | 3973 | 12:00 | 0 |
| UP | 14319 | 0 | 33 | -207 | 11092 | 0 | 149 | 102 | 14319 | 19:00 | 0 |
| Uttarakhand | 1889 | 0 | -34 | 316 | 1183 | 0 | -2 | 329 | 1917 | 9:00 | 0 |
| HP | 1305 | 0 | 47 | 277 | 733 | 0 | -7 | 527 | 1467 | 10:00 | 0 |
| J&K | 1995 | 499 | 55 | 594 | 1349 | 337 | -128 | 719 | 2022 | 20:00 | 506 |
| Chandigarh | 213 | 0 | 1 | 0 | 98 | 0 | -3 | 0 | 246 | 10:00 | 0 |
| Total | 44447 | 499 | 59 | 106 | 30430 | 337 | 354 | 359 | 44447 | 19:00 | 499 |

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

III. Regional Entities :

| 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 | Net MU |
| A. NTPC | | | | | | | | | |
| Singrauli STPS (5*200+2*500) | 2000 | 1890 | 2046 | 1734 | 44.06 | 1836 | 43.68 | 0.38 | |
| Rihand I STPS (2*500) | 1000 | 936 | 954 | 619 | 19.86 | 827 | 20.14 | -0.28 | |
| Rihand II STPS (2*500) | 1000 | 958 | 1003 | 693 | 21.11 | 880 | 21.21 | -0.10 | |
| Rihand III STPS (2*500) | 1000 | 963 | 1010 | 650 | 21.04 | 877 | 20.95 | 0.08 | |
| Dadri I STPS (4*210) | 840 | 815 | 409 | 308 | 8.24 | 343 | 8.76 | -0.52 | |
| Dadri II STPS (2*490) | 980 | 980 | 468 | 348 | 9.76 | 407 | 10.52 | -0.76 | |
| Unchahar I TPS (2*210) | 420 | 407 | 418 | 278 | 7.85 | 327 | 8.62 | -0.77 | |
| Unchahar II TPS (2*210) | 420 | 405 | 428 | 278 | 7.99 | 333 | 8.56 | -0.57 | |
| Unchahar III TPS (1*210) | 210 | 203 | 212 | 135 | 3.95 | 165 | 4.25 | -0.30 | |
| ISTPP (Jhajjar) (3*500) | 1500 | 1440 | 0 | 0 | 0.00 | 0 | 0.00 | 0.00 | |
| Dadri GPS (4*130.19+2*154.51) | 830 | 815 | 155 | 158 | 3.60 | 150 | 3.94 | -0.34 | |
| Anta GPS (3*88.71+1*153.2) | 419 | 427 | 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 | 0.02 | 1 | 0.02 | 0.00 | |
| Unchahar Solar(10) | 10 | 1 | 0 | 0 | 0.03 | 1 | 0.03 | 0.00 | |
| Singrauli Solar(15) | 15 | 2 | 0 | 0 | 0.00 | 0 | 0.04 | -0.04 | |
| KHEP(4*200) | 800 | 655 | 641 | 0 | 2.04 | 85 | 1.97 | 0.07 | |
| Sub Total (A) | 12112 | 11534 | 7744 | 5201 | 150 | 6231 | 153 | -3.15 | |
| B. NPC | | | | | | | | | |
| NAPS (2*220) | 440 | 420 | 458 | 463 | 10.09 | 420 | 10.08 | 0.01 | |
| RAPS- B (2*220) | 440 | 406 | 450 | 454 | 9.75 | 406 | 9.74 | 0.01 | |
| RAPS- C (2*220) | 440 | 220 | 238 | 238 | 5.01 | 209 | 5.28 | -0.27 | |
| Sub Total (B) | 1320 | 1046 | 1146 | 1155 | 24.85 | 1036 | 25.10 | -0.25 | |
| C. NHPC | | | | | | | | | |
| Chamera I HPS (3*180) | 540 | 540 | 505 | 0 | 1.77 | 74 | 1.62 | 0.15 | |
| Chamera II HPS (3*100) | 300 | 301 | 308 | 0 | 1.03 | 43 | 0.93 | 0.10 | |
| Chamera III HPS (3*77) | 231 | 160 | 149 | 0 | 0.49 | 20 | 0.46 | 0.03 | |
| Bairasuli HPS(3*60) | 180 | 120 | 102 | 0 | 0.54 | 22 | 0.46 | 0.08 | |
| Salal-HPS (6*115) | 690 | 82 | 230 | 120 | 2.40 | 100 | 1.97 | 0.43 | |
| Tanakpur-HPS (3*31.4) | 94 | 22 | 31 | 23 | 0.59 | 25 | 0.51 | 0.08 | |
| Uri-I HPS (4*120) | 480 | 108 | 240 | 65 | 2.81 | 117 | 2.60 | 0.20 | |
| Uri-II HPS (4*60) | 240 | 68 | 82 | 80 | 1.71 | 71 | 1.63 | 0.09 | |
| Dhauliganga-HPS (4*70) | 280 | 140 | 139 | 0 | 0.85 | 35 | 0.77 | 0.08 | |
| Dulhasti-HPS (3*130) | 390 | 387 | 397 | 0 | 2.70 | 113 | 2.50 | 0.20 | |
| Sewa-II HPS (3*40) | 120 | 119 | 70 | 0 | 0.35 | 15 | 0.36 | 0.00 | |
| Parbati 3 (4*130) | 520 | 130 | 133 | 0 | 0.41 | 17 | 0.39 | 0.02 | |
| Sub Total (C) | 4065 | 2176 | 2386 | 289 | 16 | 652 | 14 | 1.46 | |
| D.SJVNL | | | | | | | | | |
| NJPC (6*250) | 1500 | 1615 | 1322 | 0 | 6.21 | 259 | 6.20 | 0.01 | |
| Rampur HEP (6*88.67) | 412 | 375 | 373 | 0 | 1.75 | 73 | 1.72 | 0.03 | |
| Sub Total (D) | 1912 | 1990 | 1695 | 0 | 7.96 | 332 | 7.92 | 0.04 | |
| E. THDC | | | | | | | | | |
| Tehri HPS (4*250) | 1000 | 972 | 923 | 0 | 8.55 | 356 | 8.50 | 0.05 | |
| Koteshwar HPS (4*100) | 400 | 133 | 397 | 71 | 3.12 | 130 | 3.20 | -0.08 | |
| Sub Total (E) | 1400 | 1105 | 1320 | 71 | 11.66 | 486 | 11.70 | -0.04 | |
| F. BBMB | | | | | | | | | |
| Bhakra HPS (2*108+3*126+5*157) | 1379 | 520 | 1089 | 398 | 13.03 | 543 | 12.48 | 0.55 | |
| Dehar HPS (6*165) | 990 | 125 | 495 | 0 | 3.11 | 130 | 2.99 | 0.12 | |
| Pong HPS (6*66) | 396 | 136 | 396 | 0 | 3.25 | 136 | 3.26 | 0.00 | |
| Sub Total (F) | 2765 | 781 | 1980 | 398 | 19.40 | 808 | 18.73 | 0.66 | |
| G. IPP(s)/JV(s) | | | | | | | | | |
| ALLAIN DUHANGAN HPS(IPP) (2*96) | 192 | 0 | 0 | 0 | 0.37 | 15 | 0.35 | 0.01 | |
| KARCHAM WANGTOO HPS(IPP) (4*250) | 1000 | 0 | 530 | 0 | 3.06 | 128 | 3.55 | -0.49 | |
| Malana Stg-II HPS (2*50) | 100 | 0 | 0 | 0 | 0.18 | 7 | 0.16 | 0.02 | |
| Shree Cement TPS (2*150) | 300 | 0 | 146 | 170 | 3.05 | 127 | 4.45 | -1.40 | |
| Budhil HPS(IPP) (2*35) | 70 | 0 | 0 | 0 | 0.15 | 6 | 0.15 | 0.00 | |
| Sub Total (G) | 1662 | 0 | 676 | 170 | 6.80 | 283 | 8.67 | -1.86 | |
| H. Total Regional Entities (A-G) | 25237 | 18632 | 16946 | 7284 | 235.87 | 9828 | 239.00 | -3.14 | |

| 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 | 0.00 | 0 |
| | 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 | 212 | 184 | 3.38 | 141 |
| | Goidwal(GVK) (2*270) | 540 | 0 | 0 | 0.00 | 0 |

| | | | | | | |
|--|---|----------------------------------|-------------|---------------|---------------|-------------|
| | Rajpura (2*700) | 1400 | 1320 | 1020 | 29.95 | 1248 |
| | Talwandi Saboo (3*660) | 1980 | 450 | 0 | 5.39 | 225 |
| | Thermal (Total) | 6560 | 1982 | 1204 | 38.72 | 1613 |
| | Total Hydro | 1000 | 373 | 202 | 9.07 | 378 |
| | Wind Power | 0 | 0 | 0 | 0.00 | 0 |
| | Biomass | 288 | 12 | 12 | 0.30 | 12 |
| | Solar | 560 | 0 | 0 | 0.05 | 2 |
| | Renewable(Total) | 848 | 12 | 12 | 0.34 | 14 |
| | Total Punjab | 8408 | 2367 | 1418 | 48.13 | 2005 |
| Haryana | Panipat TPS (2*210+2*250) | 920 | 0 | 0 | 0.00 | 0 |
| | DCRTPP (Yamuna nagar) (2*300) | 600 | 278 | 228 | 5.77 | 241 |
| | Faridabad GPS (NTPC)(2*137.75+1*156) | 432 | 0 | 0 | 0.00 | 0 |
| | RGTPP (khedar) (IPP) (2*600) | 1200 | 1153 | 770 | 24.55 | 1023 |
| | Magnum Diesel (IPP) | 25 | 0 | 0 | 0.00 | 0 |
| | Jhajjar(CLP) (2*660) | 1320 | 1220 | 739 | 25.46 | 1061 |
| | Thermal (Total) | 4497 | 2651 | 1737 | 55.79 | 2324 |
| | Total Hydro | 62 | 18 | 20 | 0.45 | 19 |
| | 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 | 2669 | 1757 | 56.24 | 2343 |
| Rajasthan | kota TPS (2*110+2*195+3*210) | 1240 | 968 | 963 | 22.80 | 950 |
| | suratgarh TPS (6*250) | 1500 | 224 | 186 | 4.96 | 207 |
| | Chabra TPS (4*250) | 1000 | 903 | 805 | 20.73 | 864 |
| | 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 | 145 | 148 | 3.60 | 150 |
| | RAPS A (NPC) (1*100+1*200) | 300 | 190 | 190 | 4.38 | 182 |
| | Barsingar (NLC) (2*125) | 250 | 223 | 222 | 5.22 | 218 |
| | Giral LTPS (2*125) | 250 | 0 | 0 | 0.00 | 0 |
| | Rajwest LTPS (IPP) (8*135) | 1080 | 963 | 594 | 19.21 | 800 |
| | VS LIGNITE LTPS (IPP) (1*135) | 135 | 0 | 0 | 0.00 | 0 |
| | Kalisindh Thermal(2*600) | 1200 | 1142 | 841 | 23.79 | 991 |
| | Kawai(Adani) (2*660) | 1320 | 819 | 824 | 19.56 | 815 |
| | Thermal (Total) | 8876 | 5577 | 4773 | 124.25 | 5177 |
| | Total Hydro | 550 | 170 | 155 | 4.20 | 175 |
| | Wind power | 4017 | 457 | 299 | 11.67 | 486 |
| | Biomass | 99 | 7 | 7 | 0.16 | 7 |
| | Solar | 1295 | 9 | 0 | 2.41 | 101 |
| | Renewable/Others (Total) | 5411 | 473 | 306 | 14.25 | 594 |
| | Total Rajasthan | 14837 | 6220 | 5234 | 142.69 | 5946 |
| | UP | Anpara TPS (3*210+2*500) | 1630 | 1390 | 1109 | 31.65 |
| Obra TPS (2*50+2*94+5*200) | | 1194 | 478 | 518 | 12.57 | 524 |
| Paricha TPS (2*110+2*220+2*250) | | 1160 | 813 | 652 | 17.22 | 717 |
| Panki TPS (2*105) | | 210 | 0 | 68 | 1.28 | 53 |
| Harduaganj TPS (1*60+1*105+2*250) | | 665 | 540 | 417 | 11.80 | 492 |
| Tanda TPS (NTPC) (4*110) | | 440 | 373 | 276 | 8.09 | 337 |
| Roza TPS (IPP) (4*300) | | 1200 | 1134 | 756 | 23.59 | 983 |
| Anpara-C (IPP) (2*600) | | 1200 | 1062 | 626 | 22.86 | 953 |
| Bajaj Energy Pvt.Ltd(IPP) TPS (10*45) | | 450 | 203 | 141 | 4.14 | 173 |
| Anpara-D(2*500) | | 1000 | 606 | 586 | 14.07 | 586 |
| Lalitpur TPS(3*660) | | 1980 | 0 | 0 | 0.00 | 0 |
| Bara(2*660) | | 1320 | 1070 | 727 | 23.01 | 959 |
| Thermal (Total) | | 12449 | 7669 | 5876 | 170.27 | 7095 |
| Vishnuparyag HPS (IPP)(4*110) | | 440 | 73 | 73 | 1.76 | 73 |
| Alakanada(4*82.5) | | 330 | 76 | 0 | 1.10 | 46 |
| Other Hydro | | 527 | 260 | 249 | 4.69 | 195 |
| 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 | 8928 | 7048 | 198.21 | 8259 | |
| Uttarakhand | Other Hydro | 1250 | 617 | 262 | 8.82 | 367 |
| | Total Gas | 225 | 182 | 264 | 5.78 | 241 |
| | 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 | 799 | 526 | 14.65 | 610 |
| Delhi | Rajghat TPS (2*67.5) | 135 | 0 | 0 | 0.00 | 0 |
| | Delhi Gas Turbine (6x30 + 3x34) | 282 | 38 | 39 | 0.99 | 41 |
| | Pragati Gas Turbine (2x104+ 1x122) | 330 | 142 | 140 | 3.37 | 141 |
| | Rithala GPS (3*36) | 95 | 0 | 0 | 0.00 | 0 |
| | Bawana GPS (4*216+2*253) | 1370 | 290 | 280 | 6.71 | 279 |
| | Badarpur TPS (NTPC) (3*95+2*210) | 705 | 0 | 0 | 0.00 | 0 |
| | Thermal (Total) | 2917 | 470 | 459 | 11.07 | 461 |
| | 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 | 470 | 459 | 11.07 | 461 |
| HP | Baspa HPS (IPP) (3*100) | 300 | 0 | 0 | 0.95 | 40 |
| | Malana HPS (IPP) (2*43) | 86 | 0 | 0 | 0.18 | 8 |
| | Other Hydro | 372 | 137 | 35 | 2.68 | 112 |
| | 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 | 47 | 35 | 0.97 | 41 |
| | Renewable(Total) | 486 | 47 | 35 | 0.97 | 41 |
| | Total HP | 1244 | 183 | 70 | 4.79 | 200 |
| | 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 | 21830 | 16643 | 479.44 | 19977 |
| J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)] | | 8775 | 7808 | 213.96 | 8915 |
| Total Regional Availability(Gross) | 75315 | 47551 | 31736 | 929.26 | 38719 |

IV. Total Hydro Generation:

| | | | | | |
|-----------------------------|--------------|--------------|-------------|--------------|-------------|
| Regional Entities Hydro | 12234 | 8551 | 758 | 60.31 | 2513 |
| State Control Area Hydro | 7163 | 2145 | 1426 | 38.53 | 1848 |
| Total Regional Hydro | 19397 | 10697 | 2184 | 98.84 | 4361 |

V. Total Renewable Generation:

| | | | | | |
|---------------------------------|-------------|------------|------------|--------------|------------|
| Regional Entities Renewable | 30 | 0 | 0 | 0.05 | 2 |
| State Control Area Renewable | 7356 | 532 | 353 | 15.62 | 651 |
| Total Regional Renewable | 7386 | 532 | 353 | 15.67 | 653 |

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) | -300 | -500 | 50 | 500 | 0.13 | 7.68 | -7.55 |
| 765 KV Gwalior-Agra (D/C) | 2929 | 2328 | 3144 | 0 | 66.20 | 0.00 | 66.20 |
| 400 KV Zerda-Kankroli | -29 | -191 | 0 | 191 | 0.00 | 2.32 | -2.32 |
| 400 KV Zerda-Bhimnal | 27 | -27 | 142 | 175 | 0.05 | 0.00 | 0.05 |
| 220 KV Auraiya-Malanpur | -55 | -30 | 0 | 70 | 0.00 | 0.87 | -0.87 |
| 220 KV Badod-Kota/Morak | 21 | 45 | 71 | 40 | 0.47 | 0.00 | 0.47 |
| Mundra-Mohinderghar(HVDC Bipole) | 2501 | 2499 | 2507 | 0.00 | 60.45 | 0.00 | 60.45 |
| 400 KV RAPPCC-Sujalpur | 382 | 184 | 397 | 0 | 7.25 | 0.00 | 7.25 |
| 400 KV Vindhychal-Rihand | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 765 kV Phagi-Gwalior (D/C) | 1394 | 1219 | 1508 | 0 | 32.83 | 0.00 | 32.83 |
| Sub Total WR | 6870 | 5527 | | | 167.37 | 10.87 | 156.50 |
| 400 kV Sasaram - Varanasi | 218 | 180 | 224 | 0 | 7.30 | 0.00 | 7.30 |
| 400 kV Sasaram - Allahabad | 40 | 63 | 63 | 0 | 0.96 | 0.00 | 0.96 |
| 400 KV MZP- GKP (D/C) | 88 | 314 | 290 | 24 | 5.79 | 0.00 | 5.79 |
| 400 KV Patna-Balia(D/C) X 2 | 678 | 643 | 887 | 0 | 16.95 | 0.00 | 16.95 |
| 400 KV B'Sharif-Balia (D/C) | 101 | 171 | 296 | 0 | 4.20 | 0.00 | 4.20 |
| 765 KV Gaya-Balia | 330 | 316 | 368 | 0 | 7.66 | 0.00 | 7.66 |
| 765 KV Gaya-Varanasi (D/C) | 446 | 483 | 767 | 0 | 13.47 | 0.00 | 13.47 |
| 220 KV Pusauli-Sahupuri | 78 | 93 | 132 | 0 | 2.49 | 0.00 | 2.49 |
| 132 KV K'nasa-Sahupuri | 0 | 0 | 0 | 0 | 0.00 | 0.51 | -0.51 |
| 132 KV Son Ngr-Rihand | -26 | -26 | 0 | 40 | 0.00 | 0.64 | -0.64 |
| 132 KV Garhwa-Rihand | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 765 KV Sasaram - Fatehpur | -150 | -38 | 83 | 165 | 0.00 | 0.70 | -0.70 |
| 400 KV Barh -GKP (D/C) | 522 | 510 | 580 | 0 | 11.64 | 0.00 | 11.64 |
| 400 kV B'Sharif - Varanasi (D/C) | 80 | 72 | 141 | 103 | 0.85 | 0.00 | 0.85 |
| Sub Total ER | 2405 | 2781 | | | 71.31 | 1.84 | 69.47 |
| +/- 800 KV BiswanathChariali-Agra | -500 | -500 | 0 | 500.00 | 0.00 | 12.01 | -12.01 |
| Sub Total NER | -500 | -500 | | | 0.00 | 12.01 | -12.01 |
| Total IR Exch | 8775 | 7808 | | | 238.68 | 24.72 | 213.96 |

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 |
| 46.91 | 0.36 | 47.26 | 2.71 | -4.77 | 12.46 | 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 |
| 62.44 | 142.34 | 204.78 | 57.46 | 156.50 | 213.96 | -4.98 | 14.15 | 9.17 |

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 | -15 | -16 | 0 | 16 | 0 | 1 | -0.87 |

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 | 0.25 | 5.95 | 45.23 | 66.35 | 19.88 | 7.84 | 0.00 | 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) | | |
| 50.20 | 21.56 | 49.77 | 16.16 | 50.01 | 0.047 | 0.068 | 0.00 | 0.00 | 33.65 |

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 | 408 | 1:52 | 399 | 9:04 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Gorakhpur | 400 | 421 | 3:01 | 400 | 18:21 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 |
| Bareilly(PG)400kV | 400 | 419 | 2:02 | 396 | 9:15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kanpur | 400 | 418 | 2:02 | 398 | 7:23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dadri | 400 | 427 | 3:00 | 401 | 10:15 | 0.0 | 0.0 | 20.5 | 0.0 | 20.5 |
| Ballabgarh | 400 | 431 | 3:04 | 402 | 10:17 | 0.0 | 0.0 | 31.7 | 0.7 | 31.7 |
| Bawana | 400 | 427 | 3:59 | 402 | 10:16 | 0.0 | 0.0 | 20.8 | 0.0 | 20.8 |
| Bassi | 400 | 424 | 4:02 | 393 | 10:16 | 0.0 | 0.0 | 2.2 | 0.0 | 2.2 |
| Hissar | 400 | 422 | 4:00 | 400 | 6:55 | 0.0 | 0.0 | 0.6 | 0.0 | 0.6 |
| Moga | 400 | 424 | 20:42 | 406 | 7:25 | 0.0 | 0.0 | 6.0 | 0.0 | 6.0 |
| Abdullapur | 400 | 427 | 20:42 | 410 | 6:55 | 0.0 | 0.0 | 28.1 | 0.0 | 28.1 |
| Nalagarh | 400 | 432 | 21:24 | 414 | 6:59 | 0.0 | 0.0 | 46.9 | 3.1 | 46.9 |
| Kishenpur | 400 | 426 | 23:03 | 401 | 18:52 | 0.0 | 0.0 | 0.4 | 0.0 | 0.4 |
| Wagoora | 400 | 416 | 23:04 | 374 | 16:30 | 22.5 | 80.1 | 0.0 | 0.0 | 22.5 |
| Amritsar | 400 | 426 | 21:23 | 406 | 6:58 | 0.0 | 0.0 | 13.1 | 0.0 | 13.1 |
| Kashipur | 400 | 0 | 0:00 | 0 | 0:00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Hampirpur | 400 | 420 | 1:12 | 405 | 9:15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Rishikesh | 400 | 0 | 0:00 | 0 | 0:00 | 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) | | | | Volta ge Deviat |
|----------|--------------------|-------------|-------|--------------|-------|------------------------|---------|---------|---------|-----------------------|
| | | Voltage(KV) | Time | Voltage (KV) | Time | <728 kV | <742 kV | >800 kV | >820 kV | |
| Fatehpur | 765 | 777 | 22:00 | 733 | 7:51 | 0.0 | 4.5 | 0.0 | 0.0 | 0.0 |
| Balia | 765 | 788 | 2:36 | 746 | 18:51 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Moga | 765 | 805 | 22:00 | 767 | 7:23 | 0.0 | 0.0 | 1.9 | 0.0 | 1.9 |

| | | | | | | | | | | |
|-----------------|-----|-----|-------|-----|-------|-----|------|------|-----|------|
| Agra | 765 | 790 | 2:01 | 745 | 7:53 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bhiwani | 765 | 803 | 22:00 | 770 | 8:06 | 0.0 | 0.0 | 0.7 | 0.0 | 0.7 |
| Unnao | 765 | 768 | 1:14 | 732 | 18:42 | 0.0 | 45.1 | 0.0 | 0.0 | 0.0 |
| Lucknow | 765 | 801 | 3:01 | 760 | 18:51 | 0.0 | 0.0 | 0.3 | 0.0 | 0.3 |
| Meerut | 765 | 808 | 22:00 | 755 | 7:25 | 0.0 | 0.0 | 6.3 | 0.0 | 6.3 |
| Jhatikara | 765 | 806 | 4:00 | 760 | 10:15 | 0.0 | 0.0 | 12.5 | 0.0 | 12.5 |
| Bareilly 765 kV | 765 | 800 | 3:01 | 757 | 9:16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anta | 765 | 792 | 4:00 | 761 | 8:45 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Phagi | 765 | 800 | 3:59 | 757 | 7:47 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

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 | 484.71 | 577.33 | 497.89 | 1006.54 | 140.79 | 402.30 |
| Pong | 426.72 | 384.05 | 406.14 | 370.28 | 408.02 | 435.19 | 51.23 | 226.19 |
| Tehri | 829.79 | 740.04 | 801.15 | 630.22 | 794.30 | 518.27 | 36.98 | 208.00 |
| Koteshwar | 612.50 | 598.50 | 609.77 | 4.45 | 610.77 | 4.95 | 208.00 | 211.87 |
| Chamera-I | 760.00 | 748.75 | 759.18 | 0.00 | 0.00 | 0.00 | 45.84 | 47.60 |
| 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 | 503.10 | 3.26 | 496.09 | 1.47 | 37.44 | 138.06 |

* 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 | -544 | 1 | 0 | -618 | 0 | 0 | -18.45 | -1.09 | -19.54 |
| Delhi | -94 | -589 | 0 | -271 | 205 | 0 | -3.81 | -0.02 | -3.83 |
| Haryana | -847 | 367 | 0 | -513 | 114 | 0 | -14.99 | 2.90 | -12.09 |
| HP | 458 | 70 | 0 | 348 | -71 | 0 | 11.86 | -0.73 | 11.14 |
| J&K | 612 | 107 | 0 | 608 | -15 | 0 | 15.51 | 4.50 | 20.01 |
| CHD | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | -0.02 | -0.02 |
| Rajasthan | 23 | 364 | 0 | 17 | 192 | 0 | 7.85 | 6.83 | 14.68 |
| UP | 102 | 0 | 0 | -107 | -100 | 0 | -8.27 | -1.75 | -10.03 |
| Uttarakhand | 312 | 17 | 0 | 312 | 5 | 0 | 7.60 | 3.26 | 10.86 |
| Total | 21 | 337 | 0 | -223 | 329 | 0 | -2.70 | 13.89 | 11.19 |

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

| State | Bilateral (MW) | | IEX (MW) | | PXIL (MW) | |
|-------------|----------------|---------|----------|---------|-----------|---------|
| | Maximum | Minimum | Maximum | Minimum | Maximum | Minimum |
| Punjab | -534 | -1264 | 97 | -721 | 0 | 0 |
| Delhi | -17 | -284 | 647 | -595 | 0 | 0 |
| Haryana | -513 | -847 | 368 | -515 | 0 | 0 |
| HP | 696 | 327 | 329 | -410 | 0 | 0 |
| J&K | 747 | 593 | 411 | -15 | 0 | 0 |
| CHD | 0 | 0 | 39 | -31 | 0 | 0 |
| Rajasthan | 897 | 7 | 365 | 192 | 0 | 0 |
| UP | 159 | -975 | 0 | -100 | 0 | 0 |
| Uttarakhand | 342 | 312 | 453 | -1 | 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 | 32.29% |
| ER | 0.00% |
| Simultaneous | 20.14% |

(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 | 18 |
| Haryana | 1 | 13 |
| Rajasthan | 3 | 35 |
| Delhi | 4 | 44 |
| UP | 0 | 7 |
| Uttarakhand | 2 | 14 |
| HP | 6 | 40 |
| J & K | 2 | 31 |
| Chandigarh | 4 | 26 |

XIII. System Constraints:

XIV. Grid Disturbance / Any Other Significant Event:

XV. Weather Conditions For 18.01.2017 :

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 : 18.01.2017

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER