

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(भारत सरकार का उद्यम)

उत्तर क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 24.10.2017

Date of Reporting : 25.10.2017



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 |
| 42680 | 1809 | 44489 | 50.04 | 35731 | 509 | 36241 | 49.94 | 922.19 | 14.72 |

* 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 | Gas/Naptha/Diesal | Solar | Wind | Other (Biomass/ Small hydro/ Co-Generation etc.) | Total | | | | | |
| Punjab | 52.44 | 10.05 | 0.00 | 0.07 | 0.00 | 0.13 | 62.69 | 46.65 | 47.97 | 1.32 | 110.66 | 0.00 |
| Haryana | 43.63 | 0.61 | 3.69 | 0.00 | 0.00 | 0.00 | 47.92 | 79.97 | 82.30 | 2.32 | 130.22 | 0.01 |
| Rajasthan | 112.75 | 3.83 | 2.63 | 0.12 | 2.18 | 4.73 | 126.24 | 63.93 | 64.94 | 1.01 | 191.18 | 0.66 |
| Delhi | 0.00 | 0.00 | 13.34 | 0.00 | 0.00 | 0.00 | 13.34 | 64.97 | 63.81 | -1.16 | 77.15 | 0.00 |
| UP | 173.11 | 11.27 | 0.00 | 0.00 | 0.00 | 1.20 | 185.58 | 125.79 | 126.66 | 0.87 | 312.23 | 4.61 |
| Uttarakhand | 0.00 | 12.72 | 7.05 | 0.68 | 0.00 | 0.00 | 20.45 | 12.80 | 12.30 | -0.50 | 32.75 | 0.00 |
| HP | 0.00 | 6.19 | 0.00 | 0.00 | 0.00 | 3.09 | 9.28 | 14.75 | 15.26 | 0.52 | 24.55 | 0.00 |
| J & K | 0.00 | 7.58 | 0.00 | 0.00 | 0.00 | 0.00 | 7.58 | 32.85 | 32.41 | -0.43 | 40.00 | 9.45 |
| Chandigarh | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.99 | 3.45 | -0.54 | 3.45 | 0.00 |
| Total | 381.93 | 52.26 | 26.71 | 0.87 | 2.18 | 9.15 | 473.09 | 445.69 | 449.10 | 3.41 | 922.19 | 14.72 |

* Shortage furnished by the respective constituent. \$ Others include UP Co-generation and JK Diesal

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 | 5499 | 0 | 31 | -699 | 3860 | 0 | 38 | -395 | 5499 | 19 | 0 |
| Haryana | 6644 | 0 | 113 | 40 | 5252 | 0 | 81 | 59 | 6644 | 19 | 0 |
| Rajasthan | 8639 | 0 | -211 | -294 | 7734 | 0 | -123 | -182 | 9183 | 7 | 184 |
| Delhi | 3826 | 0 | 52 | -350 | 2828 | 0 | 99 | -326 | 3826 | 19 | 0 |
| UP | 12930 | 1320 | -308 | 39 | 12543 | 250 | -32 | 20 | 13560 | 24 | 0 |
| Uttarakhand | 1720 | 0 | -34 | -254 | 1142 | 0 | -34 | 7 | 1720 | 19 | 0 |
| HP | 1284 | 0 | 92 | -723 | 805 | 0 | 67 | -22 | 1354 | 8 | 0 |
| J&K | 1956 | 489 | 9 | 154 | 1470 | 259 | -36 | 396 | 1956 | 19 | 489 |
| Chandigarh | 182 | 0 | -25 | -91 | 97 | 0 | -38 | 0 | 184 | 18 | 0 |
| Total | 42680 | 1809 | -282 | -2178 | 35731 | 509 | 22 | -442 | 42680 | 19 | 1809 |

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

Diversity is 1.03

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

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 |
|---|----------------------------------|--|--------------------|------------------------|--------------------|----------------------------|--------------------|--------------|
| | | | | | | | | |
| A. NTPC | | | | | | | | |
| Singrauli STPS (5*200+2*500) | 2000 | 1720 | 1887 | 1887 | 41.80 | 1742 | 40.89 | 0.91 |
| Rihand I STPS (2*500) | 1000 | 923 | 992 | 961 | 22.00 | 917 | 21.98 | 0.03 |
| Rihand II STPS (2*500) | 1000 | 943 | 1021 | 1016 | 22.98 | 958 | 22.48 | 0.51 |
| Rihand III STPS (2*500) | 1000 | 943 | 1007 | 1021 | 23.00 | 958 | 22.24 | 0.76 |
| Dadri I STPS (4*210) | 840 | 653 | 700 | 470 | 12.54 | 522 | 12.80 | -0.27 |
| Dadri II STPS (2*490) | 980 | 790 | 868 | 546 | 15.89 | 662 | 16.27 | -0.38 |
| Unchahar I TPS (2*210) | 420 | 231 | 320 | 153 | 4.66 | 194 | 4.65 | 0.01 |
| Unchahar II TPS (2*210) | 420 | 290 | 310 | 238 | 6.03 | 251 | 6.02 | 0.01 |
| Unchahar III TPS (1*210) | 210 | 169 | 137 | 157 | 3.38 | 141 | 3.41 | -0.03 |
| Unchahar IV TPS(1*500) | 500 | 444 | 431 | 358 | 9.60 | 400 | 8.99 | 0.61 |
| ISTPP (Jhajhar) (3*500) | 1500 | 806 | 861 | 622 | 16.70 | 696 | 17.16 | -0.46 |
| Dadri GPS (4*130.19+2*154.51) | 830 | 803 | 228 | 128 | 4.48 | 187 | 4.60 | -0.11 |
| Anta GPS (3*88.71+1*153.2) | 419 | 382 | 309 | 0 | 2.30 | 96 | 2.43 | -0.13 |
| Auraiya GPS (4*111.19+2*109.30) | 663 | 597 | 293 | 0 | 1.84 | 77 | 1.92 | -0.08 |
| 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 | -0.01 |
| Singrauli Solar(15) | 15 | 3 | 0 | 0 | 0.08 | 3 | 0.07 | 0.01 |
| KHEP(4*200) | 800 | 792 | 648 | 0 | 4.14 | 172 | 3.75 | 0.39 |
| Sub Total (A) | 12612 | 10491 | 10012 | 7557 | 191 | 7978 | 190 | 1.76 |
| B. NPC | | | | | | | | |
| NAPS (2*220) | 440 | 400 | 436 | 443 | 9.56 | 399 | 9.58 | -0.02 |
| RAPS- B (2*220) | 440 | 391 | 436 | 444 | 9.50 | 396 | 9.28 | 0.22 |
| RAPS- C (2*220) | 440 | 416 | 449 | 449 | 9.90 | 413 | 9.98 | -0.08 |
| Sub Total (B) | 1320 | 1207 | 1321 | 1336 | 28.97 | 1207 | 28.85 | 0.12 |
| C. NHPC | | | | | | | | |
| Chamera I HPS (3*180) | 540 | 534 | 528 | 0 | 2.71 | 113 | 2.60 | 0.11 |
| Chamera II HPS (3*100) | 300 | 300 | 299 | 0 | 2.09 | 87 | 2.00 | 0.09 |
| Chamera III HPS (3*77) | 231 | 59 | 231 | 0 | 1.47 | 61 | 1.42 | 0.05 |
| Bairasul HPS(3*60) | 180 | 175 | 124 | 0 | 0.68 | 28 | 0.56 | 0.12 |
| Salat-HPS (6*115) | 690 | 173 | 403 | 145 | 4.86 | 202 | 4.16 | 0.70 |
| Tanakpur-HPS (3*31.4) | 94 | 56 | 54 | 58 | 1.40 | 58 | 1.33 | 0.07 |
| Uri-I HPS (4*120) | 480 | 67 | 215 | 40 | 1.75 | 73 | 1.62 | 0.14 |
| Uri-II HPS (4*60) | 240 | 49 | 37 | 37 | 1.21 | 50 | 1.17 | 0.04 |
| Dhauliganga-HPS (4*70) | 280 | 98 | 277 | 70 | 2.40 | 100 | 2.36 | 0.04 |
| Dulhasti-HPS (3*130) | 390 | 387 | 404 | 0 | 6.09 | 254 | 5.60 | 0.49 |
| Sewa-II HPS (3*40) | 120 | 119 | 91 | 0 | 0.32 | 13 | 0.36 | -0.04 |
| Parbati 3 (4*130) | 520 | 45 | 392 | 0 | 1.03 | 43 | 0.96 | 0.06 |
| Sub Total (C) | 4065 | 2062 | 3053 | 351 | 26 | 1083 | 24 | 1.86 |
| D. SJVNL | | | | | | | | |
| NJPC (6*250) | 1500 | 1482 | 1495 | 262 | 12.65 | 527 | 12.60 | 0.05 |
| Rampur HEP (6*68.67) | 412 | 408 | 412 | 72 | 3.62 | 151 | 3.51 | 0.11 |
| Sub Total (D) | 1912 | 1890 | 1907 | 334 | 16.27 | 678 | 16.11 | 0.16 |
| E. THDC | | | | | | | | |
| Tehri HPS (4*250) | 1000 | 988 | 1035 | 0 | 7.05 | 294 | 6.90 | 0.15 |
| Koteshwar HPS (4*100) | 400 | 91 | 101 | 91 | 2.25 | 94 | 2.19 | 0.06 |
| Sub Total (E) | 1400 | 1079 | 1136 | 91 | 9.30 | 387 | 9.09 | 0.21 |
| F. BBMB | | | | | | | | |
| Bhakra HPS (2*108+3*126+5*157) | 1379 | 491 | 1069 | 361 | 11.79 | 491 | 11.78 | 0.00 |
| Dehar HPS (6*165) | 990 | 246 | 495 | 165 | 6.24 | 260 | 5.91 | 0.33 |
| Pong HPS (6*66) | 396 | 291 | 396 | 198 | 6.96 | 290 | 6.99 | -0.03 |
| Sub Total (F) | 2765 | 1028 | 1960 | 724 | 24.99 | 1041 | 24.68 | 0.31 |
| G. IPP(s)/JV(s) | | | | | | | | |
| Allain Duhangan HPS(IPP) (2*96) | 192 | 0 | 143 | 0 | 0.92 | 38 | 0.91 | 0.01 |
| Karcham Wangtoo HPS(IPP) (4*250) | 1000 | 0 | 825 | 0 | 6.67 | 278 | 6.57 | 0.09 |
| Malana Stg-II HPS (2*50) | 100 | 0 | 10 | 10 | 0.52 | 22 | 0.53 | -0.01 |
| Shree Cement TPS (2*150) | 300 | 0 | 145 | 149 | 3.52 | 147 | 3.54 | -0.02 |
| Budhil HPS(IPP) (2*35) | 70 | 0 | 0 | 0 | 0.37 | 16 | 0.42 | -0.04 |
| Sainj HPS (IPP) (2*50) | 100 | 0 | 0 | 0 | 0.37 | 16 | 0.42 | -0.04 |
| Sub Total (G) | 1762 | 0 | 1124 | 159 | 12.00 | 500 | 11.97 | 0.03 |
| H. Total Regional Entities (A-G) | 25837 | 17758 | 20512 | 10552 | 308.99 | 12875 | 304.54 | 4.44 |
| 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 | -0.15 | -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 | 0 | 0 | -0.10 | -4 |
| | Goindwal(GVK) (2*270) | 540 | 290 | 290 | 8.92 | 372 |
| | Rajpura (2*700) | 1400 | 660 | 560 | 15.72 | 655 |
| | Talwandi Saboo (3*660) | 1980 | 1250 | 924 | 28.08 | 1170 |
| | Thermal (Total) | 6560 | 2200 | 1774 | 52.44 | 2185 |
| | Total Hydro | 1000 | 428 | 426 | 10.05 | 419 |
| | 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 | 2628 | 2200 | 62.69 | 2612 |
| | Haryana | Panipat TPS (2*210+2*250) | 920 | 409 | 373 | 8.57 |
| DCRTPP (Yamuna nagar) (2*300) | | 600 | 473 | 449 | 10.66 | 444 |
| Faridabad GPS (NTPC)(2*137.75+1*156) | | 432 | 154 | 154 | 3.69 | 154 |
| RGTPP (khardar) (IPP) (2*600) | | 1200 | 558 | 386 | 10.06 | 419 |
| Magnum Diesel (IPP) | | 25 | 0 | 0 | 0.00 | 0 |
| Jhajjar(CLP) (2*660) | | 1320 | 623 | 597 | 14.34 | 598 |
| Thermal (Total) | | 4497 | 2217 | 1959 | 47.32 | 1972 |
| Total Hydro | | 62 | 16 | 18 | 0.61 | 25 |
| 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 | 2233 | 1977 | 47.92 | 1997 |
| Rajasthan | | kota TPS (2*110+2*195+3*210) | 1240 | 744 | 743 | 19.30 |
| | suratgarh TPS (6*250) | 1500 | 188 | 189 | 4.64 | 193 |
| | Chabra TPS (4*250) | 1000 | 1501 | 1433 | 33.75 | 1406 |
| | Chabra TPS (1*660) | 660 | 0 | 0 | 0.00 | 0 |
| | Dholpur GPS (3*110) | 330 | 102 | 103 | 2.63 | 109 |
| | Ramgarh GPS(1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50) | 271 | 136 | 140 | 0.00 | 0 |
| | RAPS A (NPC) (1*100+1*200) | 300 | 153 | 186 | 4.20 | 175 |
| | Barsingar (NLC) (2*125) | 250 | 197 | 126 | 4.54 | 189 |
| | Giral LTPS (2*125) | 250 | 0 | 0 | 0.00 | 0 |
| | Rajwest LTPS (IPP) (8*135) | 1080 | 815 | 719 | 16.35 | 681 |
| | VS LIGNITE LTPS (IPP) (1*135) | 135 | 0 | 0 | 0.00 | 0 |
| | Kalisindh Thermal(2*600) | 1200 | 930 | 826 | 20.21 | 842 |
| | Kawai(Adani) (2*660) | 1320 | 610 | 616 | 13.97 | 582 |
| | Thermal (Total) | 9536 | 5376 | 5081 | 119.57 | 4982 |
| | Total Hydro | 550 | 156 | 157 | 3.83 | 160 |
| | Wind power | 4292 | 24 | 72 | 2.18 | 91 |
| | Biomass | 102 | 22 | 22 | 0.53 | 22 |
| | Solar | 1995 | 2 | 0 | 0.12 | 5 |
| | Renewable/Others (Total) | 6389 | 48 | 94 | 2.83 | 118 |
| Total Rajasthan | 16475 | 5580 | 5332 | 126.24 | 5260 | |
| UP | Anpara TPS (3*210+2*500) | 1630 | 1152 | 1159 | 29.34 | 1222 |
| | Obra TPS (2*50+2*94+5*200) | 1194 | 452 | 297 | 8.52 | 355 |
| | Paricha TPS (2*110+2*220+2*250) | 1160 | 581 | 632 | 16.09 | 670 |
| | Panki TPS (2*105) | 210 | 0 | 50 | 0.90 | 37 |
| | Harduaganj TPS (1*60+1*105+2*250) | 665 | 320 | 322 | 8.38 | 349 |
| | Tanda TPS (NTPC) (4*110) | 440 | 275 | 401 | 8.75 | 365 |
| | Roza TPS (IPP) (4*300) | 1200 | 773 | 960 | 22.53 | 939 |
| | Anpara-C (IPP) (2*600) | 1200 | 1082 | 1087 | 26.26 | 1094 |
| | Bajaj Energy Pvt.Ltd(IPP) TPS (10*45) | 450 | 0 | 0 | 0.00 | 0 |
| | Anpara-D(2*500) | 1000 | 451 | 449 | 10.76 | 448 |
| | Lalitpur TPS(3*660) | 1980 | 781 | 1250 | 28.12 | 1172 |
| | Bara(2*660) | 1320 | 578 | 554 | 13.46 | 561 |
| | Thermal (Total) | 12449 | 6445 | 7161 | 173.11 | 7213 |
| | Vishnuparyag HPS (IPP)(4*110) | 440 | 206 | 216 | 5.17 | 215 |
| | Alakanada(4*82.5) | 330 | 150 | 84 | 3.26 | 136 |
| | Other Hydro | 527 | 113 | 99 | 2.84 | 118 |
| | 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 | 6964 | 7610 | 185.58 | 7732 |
| | Uttarakhand | Other Hydro | 1250 | 790 | 496 | 12.72 |
| Total Gas | | 450 | 290 | 298 | 7.05 | 294 |
| Wind Power | | 0 | 0 | 0 | 0.00 | 0 |
| Biomass | | 127 | 0 | 0 | 0.00 | 0 |
| Solar | | 100 | 0 | 0 | 0.68 | 28 |
| Small Hydro (< 25 MW) | | 180 | 0 | 0 | 0.00 | 0 |
| Renewable(Total) | | 407 | 0 | 0 | 0.68 | 28 |
| Total Uttarakhand | | 2107 | 1080 | 794 | 20.45 | 852 |
| Delhi | | Rajghat TPS (2*67.5) | 135 | 0 | 0 | 0.00 |
| | Delhi Gas Turbine (6x30 + 3x34) | 282 | 36 | 37 | 0.87 | 36 |
| | Pragati Gas Turbine (2x104+ 1x122) | 330 | 262 | 262 | 6.39 | 266 |
| | Rithala GPS (3*36) | 95 | 0 | 0 | 0.00 | 0 |
| | Bawana GPS (4*216+2*253) | 1370 | 251 | 252 | 6.09 | 254 |
| | Badarpur TPS (NTPC) (3*95+2*210) | 705 | 0 | 0 | 0.00 | 0 |
| | Thermal (Total) | 2917 | 549 | 550 | 13.34 | 556 |
| | 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 | 549 | 550 | 13.34 | 556 |
| HP | Baspa HPS (IPP) (3*100) | 300 | 100 | 60 | 2.00 | 83 |
| | Malana HPS (IPP) (2*43) | 86 | 68 | 0 | 0.52 | 22 |
| | Other Hydro (>25MW) | 372 | 165 | 140 | 3.68 | 153 |
| | 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 | 85 | 62 | 3.09 | 129 |
| | Renewable(Total) | 486 | 85 | 62 | 3.09 | 129 |
| Total HP | 1244 | 418 | 262 | 9.28 | 387 | |
| J & K | Baglihar HPS (IPP) (3*150+3*150) | 900 | 255 | 255 | 6.12 | 255 |
| | 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 | 356 | 297 | 8 | 316 |
| Total State Control Area Generation | 52451 | 19808 | 19023 | 473.09 | 19712 |
| J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)] | | 4629 | 6691.11 | 158.09 | 6587 |
| Total Regional Availability(Gross) | 78288 | 44950 | 36266 | 940.17 | 39174 |

IV. Total Hydro Generation:

| | | | | | |
|---------------------------------|--------------|--------------|-------------|---------------|-------------|
| Regional Entities Hydro | 12234 | 9682 | 1510 | 89.17 | 3700 |
| State Control Area Hydro | 7468 | 2923 | 2353 | 52.26 | 2629 |
| Total Regional Hydro | 19702 | 12605 | 3863 | 141.43 | 6328 |

V. Total Renewable Generation:

| | | | | | |
|-------------------------------------|-------------|------------|------------|-------------|------------|
| Regional Entities Renewable | 30 | 0 | 0 | 0.14 | 6 |
| State Control Area Renewable | 8844 | 133 | 156 | 6.79 | 283 |
| Total Regional Renewable | 8874 | 133 | 156 | 6.93 | 289 |

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) | -500 | -500 | 0 | 500 | 0.00 | 12.27 | -12.27 |
| 765 KV Gwalior-Agra (D/C) | 1457 | 1867 | 1947 | 0 | 39.75 | 0.00 | 39.75 |
| 400 KV Zerda-Kankroli | -128 | -72 | 0 | 150 | 0.00 | 2.55 | -2.55 |
| 400 KV Zerda-Bhimnal | -57 | -51 | 73 | 138 | 0.00 | 0.44 | -0.44 |
| 220 KV Auraiya-Malanpur | -141 | -61 | 0 | 141 | 0.00 | 1.75 | -1.75 |
| 220 KV Badod-Kota/Morak | -102 | -56 | 0 | 160 | 0.00 | 2.20 | -2.20 |
| Mundra-Mohindergarh(HVDC Bipole) | 1199 | 1599 | 1604 | 0 | 33.83 | 0.00 | 33.83 |
| 400 KV RAPP- Sujalpur | 164 | 128 | 324 | 0 | 3.57 | 0.00 | 3.57 |
| 400 KV Vindhychal-Rihand | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 765 kV Phagi-Gwalior (D/C) | 263 | 697 | 882 | 0 | 15.60 | 0.00 | 15.60 |
| +/- 800 kV HVDC Champa-Kurushetra | 800 | 800 | 800 | 0 | 18.03 | 0 | 18.03 |
| Sub Total WR | 2955 | 4351 | | | 110.78 | 19.20 | 91.58 |
| 400 kV Sasaram - Varanasi | 62 | 91 | 196 | 27 | 2.02 | 0.00 | 2.02 |
| 400 kV Sasaram - Allahabad | 63 | -1 | 84 | 63 | 0.57 | 0.00 | 0.57 |
| 400 KV MZP- GKP (D/C) | 175 | 466 | 685 | 0 | 11.11 | 0.00 | 11.11 |
| 400 KV Patna-Balia(D/C) X 2 | 609 | 569 | 1149 | 0 | 21.77 | 0.00 | 21.77 |
| 400 KV B'Sharif-Balia (D/C) | 19 | 10 | 227 | 0 | 2.82 | 0.00 | 2.82 |
| 765 KV Gaya-Balia | 48 | 117 | 198 | 0 | 2.73 | 0.00 | 2.73 |
| 765 KV Gaya-Varanasi (D/C) | 126 | 128 | 294 | 0 | 2.98 | 0.00 | 2.98 |
| 220 KV Pusauli-Sahupuri | 105 | 116 | 134 | 0 | 2.86 | 0.00 | 2.86 |
| 132 KV K'nasa-Sahupuri | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 132 KV Son Ngr-Rihand | -26 | -19 | 0 | 28 | 0.00 | 0.52 | -0.52 |
| 132 KV Garhwa-Rihand | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 765 KV Sasaram - Fatehpur | -188 | -123 | 94 | 274 | 0.00 | 0.92 | -0.92 |
| 400 KV Barh -GKP (D/C) | -278 | -200 | 0 | 278 | 0.00 | 4.33 | -4.33 |
| 400 kV B'Sharif - Varanasi (D/C) | 159 | -14 | 180 | 160 | 0.00 | 0.47 | -0.47 |
| +/- 800 KV HVDC Alipurduar-Agra | 300 | 500 | 500 | 0 | 12.95 | 0.00 | 12.95 |
| Sub Total ER | 1174 | 1640 | | | 59.81 | 6.23 | 53.58 |
| +/- 800 KV HVDC BiswanathCharialli-Agra | 500 | 700 | 700 | 0.00 | 12.93 | 0.00 | 12.93 |
| Sub Total NER | 500 | 700 | | | 12.93 | 0.00 | 12.93 |
| Total IR Exch | 4629 | 6691 | | | 183.52 | 25.43 | 158.09 |

VI(B). Inter Regional Schedule & Actual Exchanges [Import (+ve)/Export (-ve)] [Corridor wise]

| ER | ISGS/LT Schedule (MU) | | Bilateral Schedule (MU) | | | Power Exchange Shdl (MU) | | Wheeling (MU) | |
|-------|-----------------------|-------|-------------------------|------------|-------|--------------------------|------------|---------------|------------|
| | Bhutan | Total | Through ER | Through WR | Total | Through ER | Through WR | Through ER | Through WR |
| 41.57 | 1.57 | 43.14 | -5.25 | -6.60 | -7.63 | -2.36 | 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 |
| 30.26 | 144.44 | 174.70 | 66.51 | 91.58 | 158.09 | 36.25 | -52.86 | -16.61 |

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 | -16 | 0 | 0 | 24 | 0 | 0 | -0.15 |

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 | 14.58 | 66.93 | 79.02 | 5.97 | 0.58 | 0.00 | 0.00 |

| Frequency (Hz) | | | | Average Frequency Hz | Frequency Variation Index | Std. Dev. | Frequency in 15 Min Block | | Freq Dev Index (% of Time) |
|----------------|-------|---------|------|-------------------------|------------------------------|-----------|---------------------------|-------------|----------------------------|
| Maximum | | Minimum | | | | | MAX (Hz) | MIN (Hz) | |
| Freq | Time | Freq | Time | | | | | | |
| 50.15 | 18.01 | 49.78 | 4.13 | 49.96 | 0.049 | 0.058 | 50.06 | 49.86 | 20.98 |

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 | 405 | 21:57 | 401 | 5:31 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Gorakhpur | 400 | 413 | 6:01 | 398 | 17:55 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bareilly(PC)400kV | 400 | 413 | 2:01 | 402 | 9:27 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kanpur | 400 | 416 | 19:58 | 408 | 9:45 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dadri | 400 | 416 | 3:58 | 403 | 9:46 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Ballabgarh | 400 | 418 | 4:00 | 403 | 9:45 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bawana | 400 | 417 | 21:56 | 405 | 11:40 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bassi | 400 | 422 | 20:54 | 395 | 5:45 | 0.0 | 0.0 | 3.8 | 0.0 | 3.8 |
| Hissar | 400 | 417 | 4:00 | 403 | 6:28 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Moga | 400 | 422 | 4:01 | 408 | 6:24 | 0.0 | 0.0 | 1.0 | 0.0 | 1.0 |
| Abdullapur | 400 | 423 | 1:14 | 408 | 18:06 | 0.0 | 0.0 | 13.1 | 0.0 | 13.1 |
| Nalagarh | 400 | 431 | 4:00 | 412 | 18:08 | 0.0 | 0.0 | 35.5 | 1.1 | 35.5 |
| Kishenpur | 400 | 427 | 4:02 | 400 | 18:24 | 0.0 | 0.0 | 15.0 | 0.0 | 15.0 |
| Wagoora | 400 | 413 | 4:02 | 371 | 18:25 | 26.9 | 68.3 | 0.0 | 0.0 | 26.9 |
| Amritsar | 400 | 431 | 2:56 | 411 | 9:27 | 0.0 | 0.0 | 31.1 | 1.4 | 31.1 |
| Kashipur | 400 | 0 | 0:00 | 0 | 0:00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Hamirpur | 400 | 426 | 2:03 | 407 | 7:27 | 0.0 | 0.0 | 22.2 | 0.0 | 22.2 |

| | | | | | | | | | | |
|-----------|-----|-----|------|-----|------|-----|-----|-----|-----|-----|
| Rishikesh | 400 | 417 | 3:59 | 400 | 9:32 | 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 | 776 | 21:14 | 752 | 5:46 | 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 | 801 | 21:37 | 773 | 6:25 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 |
| Agra | 765 | 794 | 20:37 | 764 | 5:42 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bhiwani | 765 | 802 | 21:30 | 775 | 6:26 | 0.0 | 0.0 | 2.2 | 0.0 | 2.2 |
| Unnao | 765 | 766 | 20:01 | 750 | 15:07 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Lucknow | 765 | 784 | 20:54 | 768 | 14:46 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Meerut | 765 | 806 | 21:37 | 771 | 6:50 | 0.0 | 0.0 | 5.2 | 0.0 | 5.2 |
| Jhatikara | 765 | 799 | 21:35 | 774 | 6:25 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bareilly 765 kV | 765 | 788 | 20:01 | 768 | 9:45 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anta | 765 | 787 | 20:00 | 765 | 5:36 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Phagi | 765 | 795 | 20:02 | 764 | 5:46 | 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) | nflow (m ³ /s) | Usage (m ³ /s) |
| Bhakra | 513.59 | 445.62 | 507.33 | 1411.35 | 499.52 | 1076.64 | 269.41 | 335.55 |
| Pong | 426.72 | 384.05 | 417.90 | 794.52 | 415.20 | 680.86 | 62.33 | 414.87 |
| Tehri | 829.79 | 740.04 | 824.00 | 1086.79 | 823.85 | 1083.62 | 91.47 | 153.00 |
| Koteshwar | 612.50 | 598.50 | 611.19 | 4.69 | 610.73 | 4.95 | 153.00 | 147.95 |
| Chamera-I | 760.00 | 748.75 | 754.69 | 0.00 | 0.00 | 0.00 | 78.55 | 73.27 |
| 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 | 515.02 | 3.36 | 514.76 | 4.14 | 65.84 | 141.44 |

* 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 (MU) | PXIL (MU) | Total (MU) |
| Punjab | -395 | 0 | 0 | -497 | -203 | 0 | -10.09 | -2.33 | -12.42 | |
| Delhi | -124 | -201 | 0 | -185 | -165 | 0 | -4.88 | -1.10 | -5.98 | |
| Haryana | 28 | 31 | 0 | 28 | 12 | 0 | -0.96 | 0.77 | -0.20 | |
| HP | -19 | -2 | 0 | -19 | -704 | 0 | 1.65 | -2.96 | -1.31 | |
| J&K | 159 | 237 | 0 | 159 | -5 | 0 | 3.82 | 5.07 | 8.89 | |
| CHD | 0 | 0 | 0 | 0 | -91 | 0 | 0.00 | -0.19 | -0.19 | |
| Rajasthan | -101 | -80 | 0 | -101 | -192 | 0 | -2.43 | -0.21 | -2.65 | |
| UP | 88 | -68 | 0 | 107 | -68 | 0 | 2.30 | -1.63 | 0.67 | |
| Uttarakhand | 5 | 2 | 0 | 5 | -259 | 0 | 0.48 | -0.65 | -0.17 | |
| Total | -359 | -83 | 0 | -503 | -1675 | 0 | -10.12 | -3.24 | -13.36 | |

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

| State | Bilateral (MW) | | IEX (MW) | | PXIL (MW) | |
|-------------|----------------|---------|----------|---------|-----------|---------|
| | Maximum | Minimum | Maximum | Minimum | Maximum | Minimum |
| Punjab | -395 | -497 | 0 | -481 | 0 | 0 |
| Delhi | -124 | -326 | 135 | -243 | 0 | 0 |
| Haryana | 28 | -256 | 66 | 12 | 0 | 0 |
| HP | 207 | -19 | 151 | -756 | 0 | 0 |
| J&K | 159 | 159 | 360 | -147 | 0 | 0 |
| CHD | 0 | 0 | 29 | -91 | 0 | 0 |
| Rajasthan | -101 | -101 | 291 | -702 | 0 | 0 |
| UP | 108 | 88 | -68 | -68 | 0 | 0 |
| Uttarakhand | 64 | 5 | 106 | -273 | 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 | 2 | 15 |
| Haryana | 5 | 28 |
| Rajasthan | 2 | 26 |
| Delhi | 5 | 29 |
| UP | 2 | 17 |
| Uttarakhand | 6 | 41 |
| HP | 4 | 31 |
| J & K | 2 | 18 |
| Chandigarh | 4 | 26 |

XIII. System Constraints:

XIV. Grid Disturbance / Any Other Significant Event:

XV. Weather Conditions For 24.10.2017 :

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 : 24.10.2017

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER