

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(भारत सरकार का उद्यम)

उत्तर क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009G0188682

Power Supply Position in Northern Region for 30.09.2017
Date of Reporting : 01.10.2017



I. Regional Availability/Demand:

| Evening Peak (20:00 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 |
| 48198 | 513 | 48711 | 50.03 | 46760 | 271 | 47031 | 49.96 | 1086.32 | 12.88 |

* 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 | 69.51 | 18.13 | 0.00 | 0.08 | 0.00 | 0.12 | 87.83 | 93.50 | 93.38 | -0.12 | 181.21 | 0.00 |
| Haryana | 42.98 | 0.88 | 0.00 | 0.00 | 0.00 | 0.00 | 43.86 | 93.03 | 95.66 | 2.64 | 139.52 | 0.00 |
| Rajasthan | 98.23 | 0.83 | 6.71 | 3.51 | 10.28 | 4.79 | 124.35 | 76.59 | 81.46 | 4.87 | 205.81 | 2.75 |
| Delhi | 7.01 | 0.00 | 15.61 | 0.00 | 0.00 | 0.00 | 22.62 | 65.27 | 64.12 | -1.14 | 86.74 | 0.00 |
| UP | 187.94 | 21.84 | 0.00 | 0.00 | 0.00 | 1.20 | 210.97 | 156.86 | 156.44 | -0.42 | 367.41 | 0.00 |
| Uttarakhand | 0.00 | 20.44 | 6.64 | 0.58 | 0.00 | 0.00 | 27.65 | 8.61 | 7.99 | -0.62 | 35.64 | 0.00 |
| HP | 0.00 | 11.87 | 0.00 | 0.00 | 0.00 | 7.55 | 19.42 | 3.91 | 3.43 | -0.48 | 22.85 | 0.00 |
| J & K | 0.00 | 14.03 | 0.00 | 0.00 | 0.00 | 0.00 | 14.03 | 27.46 | 28.82 | 1.35 | 42.85 | 10.13 |
| Chandigarh | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.07 | 4.29 | -0.78 | 4.29 | 0.00 |
| Total | 405.67 | 88.01 | 28.95 | 4.16 | 10.28 | 13.66 | 550.73 | 530.29 | 535.59 | 5.31 | 1086.32 | 12.88 |

* 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 (20:00 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 | 7615 | 0 | 59 | 221 | 7610 | 0 | 118 | 1014 | 7926 | 9 | 0 |
| Haryana | 6623 | 0 | 1 | 575 | 6252 | 0 | 155 | 590 | 6833 | 21 | 0 |
| Rajasthan | 8756 | 0 | 451 | -64 | 8747 | 0 | 70 | 84 | 9486 | 7 | 0 |
| Delhi | 3482 | 0 | -103 | -347 | 4016 | 0 | 87 | 143 | 4491 | 1 | 0 |
| UP | 16855 | 0 | -286 | 2316 | 15959 | 0 | -20 | 1537 | 17202 | 21 | 0 |
| Uttarakhand | 1563 | 0 | -63 | -365 | 1511 | 0 | -36 | -155 | 1616 | 19 | 0 |
| HP | 1044 | 0 | -47 | -1381 | 966 | 0 | -29 | -691 | 1186 | 8 | 0 |
| J&K | 2054 | 513 | 68 | -220 | 1534 | 271 | -1 | -264 | 2054 | 20 | 513 |
| Chandigarh | 206 | 0 | -33 | -60 | 166 | 0 | -36 | 0 | 209 | 22 | 0 |
| Total | 48198 | 513 | 47 | 674 | 46760 | 271 | 308 | 2257 | 48322 | 21 | 500 |

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

Diversity is 1.06

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 | 1740 | 1868 | 1919 | 41.82 | 1742 | 41.42 | 0.39 |
| Rihand I STPS (2*500) | 1000 | 923 | 937 | 999 | 21.78 | 907 | 21.96 | -0.18 |
| Rihand II STPS (2*500) | 1000 | 943 | 917 | 1003 | 22.58 | 941 | 22.45 | 0.13 |
| Rihand III STPS (2*500) | 1000 | 943 | 913 | 1010 | 22.29 | 929 | 22.39 | -0.10 |
| Dadri I STPS (4*210) | 840 | 435 | 425 | 428 | 10.33 | 431 | 10.28 | 0.06 |
| Dadri II STPS (2*490) | 980 | 530 | 516 | 516 | 12.15 | 506 | 12.28 | -0.14 |
| Unchahar I TPS (2*210) | 420 | 383 | 243 | 369 | 7.59 | 316 | 7.83 | -0.24 |
| Unchahar II TPS (2*210) | 420 | 383 | 236 | 410 | 7.70 | 321 | 8.08 | -0.38 |
| Unchahar III TPS (1*210) | 210 | 192 | 126 | 187 | 3.71 | 155 | 4.03 | -0.32 |
| Unchahar IV TPS (1*500) | 500 | 0 | 0 | 0 | 0.00 | 0 | 0.00 | 0.00 |
| ISTPP (Jhajhar) (3*500) | 1500 | 831 | 868 | 865 | 18.83 | 785 | 19.45 | -0.62 |
| Dadri GPS (4*130.19+2*154.51) | 830 | 724 | 132 | 125 | 3.35 | 140 | 3.57 | -0.22 |
| Anta GPS (3*88.71+1*153.2) | 419 | 352 | 0 | 0 | 0.00 | 0 | 0.51 | -0.51 |
| Auraiya GPS (4*111.19+2*109.30) | 663 | 550 | 0 | 0 | 0.00 | 0 | 0.00 | 0.00 |
| Dadri Solar(5) | 5 | 1 | 0 | 0 | 0.02 | 1 | 0.02 | 0.00 |
| Unchahar Solar(10) | 10 | 2 | 0 | 0 | 0.04 | 2 | 0.05 | -0.01 |
| Singrauli Solar(15) | 15 | 2 | 0 | 0 | 0.06 | 3 | 0.06 | 0.01 |
| KHEP(4*200) | 800 | 792 | 796 | 214 | 8.52 | 355 | 8.00 | 0.52 |
| Sub Total (A) | 12612 | 9725 | 7977 | 8045 | 181 | 7532 | 182 | -1.60 |
| B. NPC | | | | | | | | |
| NAPS (2*220) | 440 | 383 | 428 | 420 | 9.23 | 384 | 9.19 | 0.03 |
| RAPS- B (2*220) | 440 | 386 | 429 | 432 | 9.32 | 388 | 9.17 | 0.15 |
| RAPS- C (2*220) | 440 | 430 | 450 | 451 | 9.74 | 406 | 10.32 | -0.58 |
| Sub Total (B) | 1320 | 1199 | 1307 | 1303 | 28.28 | 1178 | 28.68 | -0.40 |
| C. NHPC | | | | | | | | |
| Chamera I HPS (3*180) | 540 | 534 | 538 | 0 | 4.90 | 204 | 4.70 | 0.20 |
| Chamera II HPS (3*100) | 300 | 191 | 301 | 104 | 4.03 | 168 | 3.90 | 0.13 |
| Chamera III HPS (3*77) | 231 | 116 | 226 | 78 | 2.82 | 118 | 2.78 | 0.04 |
| Bairasuli HPS(3*60) | 180 | 150 | 123 | 110 | 1.15 | 48 | 0.98 | 0.17 |
| Salal-HPS (6*115) | 690 | 379 | 420 | 550 | 9.55 | 398 | 9.09 | 0.46 |
| Tanakpur-HPS (3*31.4) | 94 | 91 | 94 | 95 | 2.28 | 95 | 2.17 | 0.11 |
| Uri-I HPS (4*120) | 480 | 137 | 308 | 82 | 3.52 | 147 | 3.29 | 0.22 |
| Uri-II HPS (4*60) | 240 | 88 | 76 | 80 | 2.17 | 90 | 2.10 | 0.06 |
| Dhauliganga-HPS (4*70) | 280 | 182 | 286 | 288 | 4.49 | 187 | 4.38 | 0.12 |
| Dulhasti-HPS (3*130) | 390 | 387 | 400 | 401 | 9.45 | 394 | 9.28 | 0.18 |
| Sewa-II HPS (3*40) | 120 | 119 | 116 | 0 | 0.35 | 15 | 0.36 | 0.00 |
| Parbati 3 (4*130) | 520 | 80 | 514 | 0 | 1.79 | 75 | 1.73 | 0.06 |
| Sub Total (C) | 4065 | 2453 | 3403 | 1788 | 47 | 1938 | 45 | 1.74 |
| D. SJVNL | | | | | | | | |
| NJPC (6*250) | 1500 | 1482 | 1497 | 775 | 20.78 | 866 | 20.63 | 0.15 |
| Rampur HEP (6*68.67) | 412 | 408 | 408 | 222 | 6.06 | 252 | 5.76 | 0.30 |
| Sub Total (D) | 1912 | 1890 | 1905 | 997 | 26.84 | 1118 | 26.39 | 0.45 |
| E. THDC | | | | | | | | |
| Tehri HPS (4*250) | 1000 | 988 | 988 | 0 | 9.76 | 407 | 9.70 | 0.06 |
| Koteshwar HPS (4*100) | 400 | 134 | 394 | 93 | 3.25 | 135 | 3.21 | 0.03 |
| Sub Total (E) | 1400 | 1122 | 1382 | 93 | 13.00 | 542 | 12.91 | 0.09 |
| F. BBMB | | | | | | | | |
| Bhakra HPS (2*108+3*126+5*157) | 1379 | 827 | 1216 | 653 | 19.90 | 829 | 19.84 | 0.06 |
| Dehar HPS (6*165) | 990 | 497 | 825 | 560 | 12.10 | 504 | 11.93 | 0.17 |
| Pong HPS (6*66) | 396 | 306 | 396 | 198 | 7.38 | 307 | 7.35 | 0.03 |
| Sub Total (F) | 2765 | 1630 | 2437 | 1411 | 39.37 | 1641 | 39.11 | 0.26 |
| G. IPP(s)/JV(s) | | | | | | | | |
| Allain Duhangan HPS(IPP) (2*96) | 192 | 0 | 100 | 49 | 1.81 | 75 | 1.73 | 0.08 |
| Karcham Wangtoo HPS(IPP) (4*250) | 1000 | 0 | 1000 | 360 | 10.74 | 448 | 10.71 | 0.03 |
| Malana Stg-II HPS (2*50) | 100 | 0 | 111 | 45 | 1.08 | 45 | 1.02 | 0.05 |
| Shree Cement TPS (2*150) | 300 | 0 | 147 | 145 | 3.23 | 135 | 3.02 | 0.21 |
| Budhil HPS(IPP) (2*35) | 70 | 0 | 36 | 36 | 0.85 | 36 | 0.82 | 0.03 |
| Sainj HPS (IPP) (2*50) | 100 | | | | | | | |
| Sub Total (G) | 1762 | 0 | 1404 | 634 | 17.71 | 738 | 17.30 | 0.41 |
| H. Total Regional Entities (A-G) | 25837 | 18018 | 19815 | 14272 | 352.48 | 14687 | 351.54 | 0.94 |
| 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 | -0.17 | -7 |
| | 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 | 250 | 252 | 5.78 | 241 |
| | Goindwal(GVK) (2*270) | 540 | 360 | 360 | 9.02 | 376 |
| | Rajpura (2*700) | 1400 | 660 | 660 | 15.69 | 654 |
| | Talwandi Saboo (3*660) | 1980 | 1700 | 1600 | 39.21 | 1634 |
| | Thermal (Total) | 6560 | 2970 | 2872 | 69.51 | 2896 |
| | Total Hydro | 1000 | 758 | 763 | 18.13 | 755 |
| | Wind Power | 0 | 0 | 0 | 0.00 | 0 |
| | Biomass | 303 | 0 | 0 | 0.12 | 5 |
| | Solar | 859 | 0 | 0 | 0.08 | 3 |
| | Renewable(Total) | 1162 | 0 | 0 | 0.20 | 8 |
| | Total Punjab | 8722 | 3728 | 3635 | 87.83 | 3660 |
| | Haryana | Panipat TPS (2*210+2*250) | 920 | 402 | 370 | 9.32 |
| DCRTPP (Yamuna nagar) (2*300) | | 600 | 508 | 440 | 11.12 | 463 |
| Faridabad GPS (NTPC)(2*137.75+1*156) | | 432 | 0 | 0 | 0.00 | 0 |
| RGTPP (khardar) (IPP) (2*600) | | 1200 | 532 | 392 | 10.42 | 434 |
| Magnum Diesel (IPP) | | 25 | 0 | 0 | 0.00 | 0 |
| Jhajjar(CLP) (2*660) | | 1320 | 540 | 590 | 12.12 | 505 |
| Thermal (Total) | | 4497 | 1982 | 1792 | 42.98 | 1791 |
| Total Hydro | | 62 | 35 | 36 | 0.88 | 37 |
| 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 | 2017 | 1828 | 43.86 | 1827 |
| Rajasthan | | kota TPS (2*110+2*195+3*210) | 1240 | 585 | 588 | 13.99 |
| | suratgarh TPS (6*250) | 1500 | 656 | 655 | 15.99 | 666 |
| | Chabra TPS (4*250) | 1000 | 746 | 870 | 19.07 | 794 |
| | Chabra TPS (1*660) | 660 | 0 | 0 | 0.00 | 0 |
| | Dholpur GPS (3*110) | 330 | 87 | 86 | 2.14 | 89 |
| | Ramgarh GPS(1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50) | 271 | 186 | 186 | 4.58 | 191 |
| | RAPS A (NPC) (1*100+1*200) | 300 | 170 | 167 | 4.18 | 174 |
| | Barsingsar (NLC) (2*125) | 250 | 220 | 220 | 5.19 | 216 |
| | Giral LTPS (2*125) | 250 | 0 | 0 | 0.00 | 0 |
| | Rajwest LTPS (IPP) (8*135) | 1080 | 831 | 832 | 19.91 | 830 |
| | VS LIGNITE LTPS (IPP) (1*135) | 135 | 0 | 0 | 0.00 | 0 |
| | Kalisindh Thermal(2*600) | 1200 | 1009 | 1011 | 24.09 | 1004 |
| | Kawai(Adani) (2*660) | 1320 | 0 | 0 | 0.00 | 0 |
| | Thermal (Total) | 9536 | 4490 | 4615 | 109.12 | 4547 |
| Total Hydro | 550 | 114 | 114 | 0.83 | 35 | |
| Wind power | 4292 | 129 | 829 | 10.28 | 428 | |
| Biomass | 102 | 26 | 26 | 0.61 | 26 | |
| Solar | 1995 | 0 | 0 | 3.51 | 146 | |
| Renewable/Others (Total) | 6389 | 155 | 855 | 14.40 | 600 | |
| Total Rajasthan | 16475 | 4759 | 5584 | 124.35 | 5181 | |
| UP | Anpara TPS (3*210+2*500) | 1630 | 1204 | 1205 | 29.67 | 1236 |
| | Obra TPS (2*50+2*94+5*200) | 1194 | 413 | 422 | 10.44 | 435 |
| | Paricha TPS (2*110+2*220+2*250) | 1160 | 654 | 631 | 15.02 | 626 |
| | Panki TPS (2*105) | 210 | 0 | 0 | 0.00 | 0 |
| | Harduaganj TPS (1*60+1*105+2*250) | 665 | 320 | 446 | 10.14 | 422 |
| | Tanda TPS (NTPC) (4*110) | 440 | 358 | 388 | 9.03 | 376 |
| | Roza TPS (IPP) (4*300) | 1200 | 796 | 762 | 18.73 | 781 |
| | Anpara-C (IPP) (2*600) | 1200 | 1078 | 1082 | 25.81 | 1075 |
| | Bajaj Energy Pvt.Ltd(IPP) TPS (10*45) | 450 | 0 | 0 | 0.00 | 0 |
| | Anpara-D(2*500) | 1000 | 453 | 432 | 10.84 | 452 |
| | Lalitpur TPS(3*660) | 1980 | 1227 | 1247 | 29.48 | 1228 |
| | Bara(2*660) | 1320 | 1203 | 1198 | 28.77 | 1199 |
| | Thermal (Total) | 12449 | 7706 | 7813 | 187.94 | 7831 |
| | Vishnuparyag HPS (IPP)(4*110) | 440 | 395 | 385 | 9.17 | 382 |
| Alakanada(4*82.5) | 330 | 250 | 255 | 6.32 | 263 | |
| Other Hydro | 527 | 206 | 204 | 6.35 | 265 | |
| 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 | 8607 | 8707 | 210.97 | 8791 | |
| Uttarakhand | Other Hydro | 1250 | 838 | 910 | 20.44 | 852 |
| | Total Gas | 450 | 275 | 281 | 6.64 | 276 |
| | Wind Power | 0 | 0 | 0 | 0.00 | 0 |
| | Biomass | 127 | 0 | 0 | 0.00 | 0 |
| | Solar | 100 | 0 | 0 | 0.58 | 24 |
| | Small Hydro (< 25 MW) | 180 | 0 | 0 | 0.00 | 0 |
| | Renewable(Total) | 407 | 0 | 0 | 0.58 | 24 |
| | Total Uttarakhand | 2107 | 1113 | 1191 | 27.65 | 1152 |
| Delhi | Rajghat TPS (2*67.5) | 135 | 0 | 0 | 0.00 | 0 |
| | Delhi Gas Turbine (6x30 + 3x34) | 282 | 114 | 111 | 2.55 | 106 |
| | Pragati Gas Turbine (2x104+ 1x122) | 330 | 256 | 261 | 6.43 | 268 |
| | Rithala GPS (3*36) | 95 | 0 | 0 | 0.00 | 0 |
| | Bawana GPS (4*216+2*253) | 1370 | 250 | 263 | 6.63 | 276 |
| | Badarpur TPS (NTPC) (3*95+2*210) | 705 | 321 | 318 | 7.01 | 292 |
| | Thermal (Total) | 2917 | 941 | 953 | 22.62 | 942 |
| | 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 | 941 | 953 | 22.62 | 942 | |
| HP | Baspa HPS (IPP) (3*100) | 300 | 129 | 149 | 3.81 | 159 |
| | Malana HPS (IPP) (2*43) | 86 | 82 | 36 | 1.07 | 44 |
| | Other Hydro (>25MW) | 372 | 329 | 292 | 6.99 | 291 |
| | 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 | 315 | 315 | 7.55 | 315 |
| Renewable(Total) | 486 | 315 | 315 | 7.55 | 315 | |
| Total HP | 1244 | 855 | 791 | 19.42 | 809 | |
| J & K | Baglihar HPS (IPP) (3*150+3*150) | 900 | 589 | 441 | 11.63 | 485 |
| | Other Hydro/IPP(including 98 MW Small Hydro) | 308 | 138 | 92 | 2.40 | 100 |
| | 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 | 727 | 533 | 14 | 585 |
| Total State Control Area Generation | 52451 | 22747 | 23223 | 550.73 | 22947 |
| J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)] | | 7306 | 10150.19 | 198.18 | 8258 |
| Total Regional Availability(Gross) | 78288 | 49868 | 47644 | 1101.39 | 45891 |

IV. Total Hydro Generation:

| | | | | | |
|---------------------------------|--------------|--------------|-------------|---------------|--------------|
| Regional Entities Hydro | 12234 | 11144 | 4956 | 148.72 | 6161 |
| State Control Area Hydro | 7468 | 4453 | 4272 | 88.01 | 4282 |
| Total Regional Hydro | 19702 | 15597 | 9229 | 236.73 | 10443 |

V. Total Renewable Generation:

| | | | | | |
|-------------------------------------|-------------|------------|-------------|--------------|------------|
| Regional Entities Renewable | 30 | 0 | 0 | 0.13 | 5 |
| State Control Area Renewable | 8844 | 470 | 1170 | 22.72 | 947 |
| Total Regional Renewable | 8874 | 470 | 1170 | 22.84 | 952 |

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

| Element | Peak(20:00 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 | -200 | 0 | 500 | 0.00 | 9.61 | -9.61 |
| 765 KV Gwalior-Agra (D/C) | 1790 | 2348 | 2437 | 0 | 44.28 | 0.00 | 44.28 |
| 400 KV Zerda-Kankroli | -82 | -49 | 4 | 158 | 0.00 | 1.63 | -1.63 |
| 400 KV Zerda-Bhinmal | 43 | -46 | 79 | 134 | 0.00 | 0.82 | -0.82 |
| 220 KV Auraiya-Malanpur | -38 | -26 | 0 | 73 | 0.00 | 0.88 | -0.88 |
| 220 KV Badod-Kota/Morak | 18 | 64 | 151 | 19 | 1.21 | 0.00 | 1.21 |
| Mundra-Mohindergarh(HVDC Bipole) | 1199 | 1499 | 1504 | 0 | 29.20 | 0.00 | 29.20 |
| 400 KV RAPP- Sujalpur | 345 | 298 | 429 | 0 | 7.26 | 0.00 | 7.26 |
| 400 KV Vindhychal-Rihand | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 765 kV Phagi-Gwalior (D/C) | 829 | 1146 | 1329 | 0 | 24.42 | 0.00 | 24.42 |
| +/- 800 kV HVDC Champa-Kurushetra | 500 | 1000 | 1000 | 0 | 15.20 | 0 | 15.20 |
| Sub Total WR | 4104 | 6034 | | | 121.57 | 12.93 | 108.64 |
| 400 kV Sasaram - Varanasi | 183 | 164 | 187 | 0 | 4.27 | 0.00 | 4.27 |
| 400 kV Sasaram - Allahabad | 54 | 77 | 77 | 0 | 1.55 | 0.00 | 1.55 |
| 400 KV MZP- GKP (D/C) | 544 | 724 | 780 | 0 | 15.18 | 0.00 | 15.18 |
| 400 KV Patna-Balia(D/C) X 2 | 771 | 1031 | 1059 | 0 | 21.30 | 0.00 | 21.30 |
| 400 KV B'Sharif-Balia (D/C) | 137 | 249 | 260 | 0 | 4.74 | 0.00 | 4.74 |
| 765 KV Gaya-Balia | 224 | 314 | 314 | 0 | 5.36 | 0.00 | 5.36 |
| 765 KV Gaya-Varanasi (D/C) | 145 | 404 | 404 | 0 | 6.59 | 0.00 | 6.59 |
| 220 KV Pusauli-Sahupuri | 239 | 246 | 250 | 0 | 5.88 | 0.00 | 5.88 |
| 132 KV K'nasa-Sahupuri | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 132 KV Son Ngr-Rihand | -20 | -27 | 0 | 32 | 0.00 | 0.51 | -0.51 |
| 132 KV Garhwa-Rihand | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 765 KV Sasaram - Fatehpur | -223 | -96 | 0 | 259 | 0.00 | 3.14 | -3.14 |
| 400 KV Barh -GKP (D/C) | -198 | -192 | 0 | 206 | 0.00 | 3.98 | -3.98 |
| 400 kV B'Sharif - Varanasi (D/C) | 46 | -78 | 139 | 72 | 0.85 | 0.00 | 0.85 |
| +/- 800 KV HVDC Alipurduar-Agra | 600 | 600 | 600 | 0 | 15.69 | 0.00 | 15.69 |
| Sub Total ER | 2502 | 3416 | | | 81.40 | 7.63 | 73.78 |
| +/- 800 KV HVDC BiswanathCharialli-Agra | 700 | 700 | 700 | 0.00 | 15.76 | 0.00 | 15.76 |
| Sub Total NER | 700 | 700 | | | 15.76 | 0.00 | 15.76 |
| Total IR Exch | 7306 | 10150 | | | 218.74 | 20.56 | 198.18 |

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 | Through ER | Through WR | Through ER | Through WR |
| 38.02 | 2.63 | 40.65 | 14.16 | 17.56 | -0.04 | -5.53 | 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 |
| 54.77 | 143.71 | 198.48 | 89.54 | 108.64 | 198.18 | 34.77 | -35.07 | -0.30 |

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

| Element | Peak(20:00 Hrs) MW | Off Peak(03:00 Hrs) MW | Maximum Interchange (MW) | | Energy (MU) | | Net Energy MU |
|---------------------------------|-----------------------|---------------------------|--------------------------|--------|-------------|--------|------------------|
| | | | Import | Export | Import | Export | |
| 132 KV Tanakpur - Mahendarnagar | -22 | 0 | 0 | 24 | 0 | 0 | -0.06 |

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 | 3.10 | 52.64 | 82.57 | 12.44 | 1.93 | 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 (Hz) | MIN (Hz) | |
| Freq | Time | Freq | Time | Hz | Index | | | | |
| 50.16 | 8.01 | 49.84 | 22.22 | 50.00 | 0.027 | 0.051 | 50.10 | 49.90 | 17.43 |

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 | 403 | 7:55 | 398 | 5:27 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Gorakhpur | 400 | 413 | 7:58 | 389 | 22:45 | 0.0 | 1.9 | 0.0 | 0.0 | 0.0 |
| Bareilly(PC)400kV | 400 | 418 | 6:02 | 400 | 22:22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kanpur | 400 | 419 | 7:57 | 404 | 22:18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dadri | 400 | 414 | 6:01 | 402 | 12:14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Ballabhgarh | 400 | 421 | 7:59 | 403 | 12:34 | 0.0 | 0.0 | 0.2 | 0.0 | 0.2 |
| Bawana | 400 | 415 | 6:02 | 401 | 12:38 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bassi | 400 | 423 | 8:00 | 401 | 23:40 | 0.0 | 0.0 | 1.9 | 0.0 | 1.9 |
| Hissar | 400 | 415 | 8:01 | 399 | 12:40 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Moga | 400 | 413 | 3:57 | 400 | 11:22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Abdullapur | 400 | 421 | 6:00 | 408 | 11:26 | 0.0 | 0.0 | 1.0 | 0.0 | 1.0 |
| Nalagarh | 400 | 422 | 17:58 | 411 | 12:37 | 0.0 | 0.0 | 2.2 | 0.0 | 2.2 |
| Kishenpur | 400 | 418 | 3:39 | 399 | 11:21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Wagoora | 400 | 413 | 3:54 | 377 | 10:15 | 11.5 | 55.6 | 0.0 | 0.0 | 11.5 |
| Amritsar | 400 | 418 | 3:40 | 406 | 11:21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kashipur | 400 | 0 | 0:00 | 0 | 0:00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Hamirpur | 400 | 415 | 17:58 | 403 | 11:28 | 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) | | | | Voltage Deviation Index |
|-----------------|--------------------|-------------|------|--------------|-------|------------------------|---------|---------|---------|-------------------------|
| | | Voltage(KV) | Time | Voltage (KV) | Time | <728 kV | <742 kV | >800 kV | >820 kV | |
| Fatehpur | 765 | 782 | 8:00 | 753 | 11:33 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Balia | 765 | 789 | 8:01 | 757 | 23:08 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Moga | 765 | 792 | 8:00 | 766 | 11:28 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Agra | 765 | 800 | 8:00 | 766 | 12:05 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bhiwani | 765 | 802 | 7:58 | 775 | 11:18 | 0.0 | 0.0 | 0.7 | 0.0 | 0.7 |
| Unnao | 765 | 0 | 0:00 | 0 | 0:00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Lucknow | 765 | 789 | 6:05 | 755 | 23:08 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Meerut | 765 | 803 | 7:59 | 770 | 12:40 | 0.0 | 0.0 | 1.6 | 0.0 | 1.6 |
| Jhatikara | 765 | 802 | 7:59 | 772 | 11:21 | 0.0 | 0.0 | 0.5 | 0.0 | 0.5 |
| Bareilly 765 kV | 765 | 802 | 6:02 | 763 | 23:07 | 0.0 | 0.0 | 0.6 | 0.0 | 0.6 |
| Anta | 765 | 790 | 8:00 | 768 | 11:22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Phagi | 765 | 801 | 8:00 | 769 | 11:35 | 0.0 | 0.0 | 0.5 | 0.0 | 0.5 |

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 | 508.83 | 1485.27 | 502.76 | 1205.87 | 579.82 | 601.02 |
| Pong | 426.72 | 384.05 | 420.51 | 916.71 | 416.47 | 730.66 | 151.04 | 425.26 |
| Tehri | 829.79 | 740.04 | 824.80 | 1103.72 | 824.45 | 1096.00 | 163.29 | 212.00 |
| Koteshwar | 612.50 | 598.50 | 611.17 | 5.20 | 609.13 | 4.21 | 212.00 | 214.00 |
| Chamera-I | 760.00 | 748.75 | 754.23 | 0.00 | 0.00 | 0.00 | 132.04 | 132.92 |
| 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 | 518.96 | 7.08 | 517.93 | 5.73 | 126.88 | 292.41 |

* NA: Not Available

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

| State | Off- Peak Hours (03:00 Hrs) | | | Peak Hours (20:00 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 | 1014 | 0 | 0 | 423 | -202 | 0 | 24.15 | -1.59 | | 22.56 |
| Delhi | 465 | -322 | 0 | 205 | -553 | 0 | 7.10 | -7.51 | | -0.41 |
| Haryana | 558 | 32 | 0 | 558 | 17 | 0 | 9.26 | -0.15 | | 9.11 |
| HP | -552 | -139 | 0 | -322 | -1059 | 0 | -9.89 | -9.68 | | -19.57 |
| J&K | -511 | 247 | 0 | -511 | 291 | 0 | -12.27 | 8.76 | | -3.50 |
| CHD | 0 | 0 | 0 | 0 | -60 | 0 | 0.00 | -0.22 | | -0.22 |
| Rajasthan | -8 | 92 | 0 | -58 | -6 | 0 | -0.38 | 3.65 | | 3.26 |
| UP | 924 | 613 | 0 | 1012 | 1304 | 0 | 18.15 | 12.23 | | 30.38 |
| Uttarakhand | -62 | -92 | 0 | -63 | -302 | 0 | -1.50 | -2.77 | | -4.27 |
| Total | 1827 | 430 | 0 | 1244 | -570 | 0 | 34.62 | 2.73 | | 37.35 |

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

| State | Bilateral (MW) | | IEX (MW) | | PXIL (MW) | |
|-------------|----------------|---------|----------|---------|-----------|---------|
| | Maximum | Minimum | Maximum | Minimum | Maximum | Minimum |
| Punjab | 1291 | 423 | 0 | -506 | 0 | 0 |
| Delhi | 690 | 93 | -91 | -628 | 0 | 0 |
| Haryana | 558 | 300 | 32 | -489 | 0 | 0 |
| HP | -322 | -591 | -107 | -1059 | 0 | 0 |
| J&K | -511 | -511 | 485 | 145 | 0 | 0 |
| CHD | 0 | 0 | 10 | -60 | 0 | 0 |
| Rajasthan | -8 | -58 | 632 | -13 | 0 | 0 |
| UP | 1090 | 407 | 1697 | -70 | 0 | 0 |
| Uttarakhand | -62 | -63 | 70 | -343 | 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 | 1 | 17 |
| Haryana | 3 | 24 |
| Rajasthan | 2 | 19 |
| Delhi | 6 | 30 |
| UP | 1 | 19 |
| Uttarakhand | 1 | 21 |
| HP | 6 | 37 |
| J & K | 2 | 27 |
| Chandigarh | 3 | 24 |

XIII. System Constraints:

XIV. Grid Disturbance / Any Other Significant Event:

XV. Weather Conditions For 30.09.2017 :

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 : 30.09.2017

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER