

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पारदर्शिता की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 21.07.2016
Date of Reporting : 22.07.2016



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 |
| 48899 | 2007 | 50905 | 50.05 | 48314 | 2600 | 50914 | 50.03 | 1160.0 | 13.33 |

*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 | 86.03 | 14.24 | | 100.28 | 135.33 | 135.68 | 0.35 | 235.96 | 0.00 |
| Haryana | 32.40 | 0.77 | | 33.17 | 157.93 | 156.57 | -1.36 | 189.74 | 0.00 |
| Rajasthan | 92.79 | 0.00 | 38.05 | 130.84 | 65.22 | 66.62 | 1.40 | 197.46 | 0.00 |
| Delhi | 20.84 | | | 20.84 | 96.12 | 96.52 | 0.39 | 117.36 | 0.03 |
| UP | 133.91 | 20.99 | | 154.90 | 154.77 | 157.23 | 2.45 | 312.13 | 4.54 |
| Uttarakhand | | 19.60 | | 19.63 | 19.60 | 20.53 | 0.93 | 40.16 | 0.34 |
| HP | | 24.27 | | 24.27 | 0.51 | 2.72 | 2.22 | 26.99 | 0.08 |
| J & K | | 22.48 | 0.00 | 22.48 | 16.14 | 10.90 | -5.23 | 33.38 | 8.35 |
| Chandigarh | | | | 0.00 | 6.78 | 6.83 | 0.05 | 6.83 | 0.00 |
| Total | 365.97 | 102.35 | 38.05 | 506.41 | 652.40 | 653.60 | 1.20 | 1160.00 | 13.33 |

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

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 | 9856 | 0 | 151 | 1861 | 9022 | 0 | 21 | 1564 | 10126 | 24:00 | 0 |
| Haryana | 8163 | 0 | -248 | 1965 | 8368 | 0 | 37 | 2273 | 9113 | 21:00 | 0 |
| Rajasthan | 7827 | 0 | 77 | 301 | 8374 | 0 | -58 | 342 | 9298 | 24:00 | 0 |
| Delhi | 5032 | 0 | -44 | 499 | 4773 | 0 | 147 | 407 | 5792 | 16:00 | 0 |
| UP | 13198 | 1515 | 220 | 602 | 13808 | 2315 | 239 | 915 | 13808 | 3:00 | 2315 |
| Uttarakhand | 1806 | 75 | 12 | -42 | 1599 | 0 | 51 | -127 | 1930 | 21:00 | 75 |
| HP | 1088 | 0 | 47 | -1552 | 980 | 0 | 198 | -1733 | 1265 | 11:00 | 0 |
| J&K | 1666 | 417 | -82 | -668 | 1139 | 285 | -158 | -1021 | 1689 | 21:00 | 422 |
| Chandigarh | 262 | 0 | -30 | 0 | 251 | 0 | 16 | -40 | 357 | 15:00 | 0 |
| Total | 48899 | 2007 | 103 | 2966 | 48314 | 2600 | 494 | 2580 | 51658 | 23:00 | 83 |

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

Diversity is: 1.03

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 | |
|---|----------------------------------|--------------------------|--------------------|------------------------|--------------------|------------------------|--------------------|------|--------------|
| | | | | | | | | (MW) | (Hrs) |
| A. NTPC | | | | | | | | | |
| Singrauli STPS (5*200+2*500) | 2000 | 1868 | 2009 | 2012 | 44.94 | 1872 | 44.74 | | 0.20 |
| Rihand I STPS (2*500) | 1000 | 464 | 515 | 421 | 10.72 | 447 | 10.71 | | 0.00 |
| Rihand II STPS (2*500) | 1000 | 945 | 1020 | 863 | 21.12 | 880 | 21.30 | | -0.18 |
| Rihand III STPS (2*500) | 1000 | 945 | 1005 | 924 | 21.27 | 886 | 21.94 | | -0.67 |
| Dadri I STPS (4*210) | 840 | 805 | 655 | 553 | 11.00 | 458 | 11.28 | | -0.28 |
| Dadri II STPS (2*490) | 980 | 960 | 1005 | 775 | 18.01 | 750 | 18.83 | | -0.82 |
| Unchahar I TPS (2*210) | 420 | 350 | 328 | 336 | 7.09 | 296 | 7.89 | | -0.80 |
| Unchahar II TPS (2*210) | 420 | 400 | 355 | 388 | 7.54 | 314 | 8.45 | | -0.92 |
| Unchahar III TPS (1*210) | 210 | 200 | 169 | 168 | 3.41 | 142 | 4.03 | | -0.62 |
| ISTPP (Jhajjar) (3*500) | 1500 | 1425 | 1184 | 916 | 23.71 | 988 | 24.05 | | -0.34 |
| Dadri GPS (4*130.19+2*154.51) | 830 | 774 | 377 | 311 | 7.14 | 298 | 7.47 | | -0.32 |
| Anta GPS (3*88.71+1*153.2) | 419 | 400 | 0 | 0 | 0.00 | 0 | 0.05 | | -0.05 |
| Auraiya GPS (4*111.19+2*109.30) | 663 | 631 | 133 | 142 | 3.22 | 134 | 3.36 | | -0.14 |
| Dadri Solar(5) | 5 | 1 | 0 | 0 | 0.02 | 1 | 0.02 | | 0.00 |
| Unchahar Solar(10) | 10 | 1 | 0 | 0 | 0.35 | 15 | 0.03 | | 0.32 |
| Singrauli Solar(15) | 15 | 1 | 0 | 0 | 0.01 | 0 | 0.04 | | -0.03 |
| KHEP(4*200) | 800 | 855 | 852 | 852 | 20.56 | 857 | 20.52 | | 0.04 |
| Sub Total (A) | 12112 | 11025 | 9607 | 8661 | 200 | 8338 | 205 | | -4.61 |
| B. NPC | | | | | | | | | |
| NAPS (2*220) | 440 | 385 | 414 | 430 | 9.20 | 383 | 9.24 | | -0.04 |
| RAPS- B (2*220) | 440 | 181 | 203 | 204 | 4.24 | 177 | 4.34 | | -0.11 |
| RAPS- C (2*220) | 440 | 410 | 433 | 440 | 9.36 | 390 | 9.84 | | -0.48 |
| Sub Total (B) | 1320 | 976 | 1050 | 1074 | 22.80 | 950 | 23.42 | | -0.62 |
| C. NHPC | | | | | | | | | |
| Chamera I HPS (3*180) | 540 | 540 | 541 | 541 | 12.94 | 539 | 12.96 | | -0.02 |
| Chamera II HPS (3*100) | 300 | 301 | 309 | 303 | 7.26 | 303 | 7.22 | | 0.04 |
| Chamera III HPS (3*77) | 231 | 229 | 232 | 233 | 5.33 | 222 | 5.32 | | 0.02 |
| Bairasuli HPS(3*60) | 180 | 180 | 184 | 0 | 1.86 | 78 | 1.84 | | 0.02 |
| Salal-HPS (6*115) | 690 | 662 | 671 | 671 | 16.11 | 671 | 15.88 | | 0.22 |
| Tanakpur-HPS (3*31.4) | 94 | 90 | 98 | 97 | 2.35 | 98 | 2.13 | | 0.22 |
| Uri-I HPS (4*120) | 480 | 388 | 412 | 417 | 9.48 | 395 | 9.31 | | 0.16 |
| Uri-II HPS (4*60) | 240 | 214 | 238 | 196 | 5.26 | 219 | 5.13 | | 0.13 |
| Dhauliganga-HPS (4*70) | 280 | 280 | 285 | 271 | 6.65 | 277 | 6.72 | | -0.07 |
| Dulhasti-HPS (3*130) | 390 | 381 | 394 | 388 | 9.18 | 383 | 9.14 | | 0.04 |
| Sewa-II HPS (3*40) | 120 | 110 | 126 | 111 | 0.75 | 31 | 0.75 | | 0.00 |
| Parbati 3 (4*130) | 520 | 390 | 263 | 126 | 3.00 | 125 | 2.94 | | 0.06 |
| Sub Total (C) | 4065 | 3764 | 3754 | 3354 | 80 | 3340 | 79 | | 0.81 |
| D. SJVNL | | | | | | | | | |
| NJPC (6*250) | 1500 | 1605 | 1613 | 1615 | 38.46 | 1603 | 38.49 | | -0.02 |
| Rampur HEP (6*68.67) | 412 | 442 | 447 | 450 | 10.80 | 450 | 10.61 | | 0.19 |
| Sub Total (D) | 1912 | 2047 | 2060 | 2065 | 49.26 | 2053 | 49.09 | | 0.17 |
| E. THDC | | | | | | | | | |
| Tehri HPS (4*250) | 1000 | 812 | 810 | 794 | 19.34 | 806 | 19.40 | | -0.06 |
| Koteshwar HPS (4*100) | 400 | 327 | 397 | 273 | 7.87 | 328 | 7.84 | | 0.03 |
| Sub Total (E) | 1400 | 1139 | 1207 | 1067 | 27.22 | 1134 | 27.24 | | -0.02 |
| F. BBMB | | | | | | | | | |
| Bhakra HPS (2*108+3*126+5*157) | 1379 | 1080 | 1325 | 911 | 26.02 | 1084 | 25.92 | | 0.10 |
| Dehar HPS (6*165) | 990 | 606 | 825 | 590 | 14.60 | 608 | 14.54 | | 0.06 |
| Pong HPS (6*66) | 396 | 64 | 171 | 0 | 1.53 | 64 | 1.53 | | -0.01 |
| Sub Total (F) | 2765 | 1750 | 2321 | 1501 | 42.14 | 1756 | 41.99 | | 0.15 |
| G. IPP(s)/JV(s) | | | | | | | | | |
| ALLAIN DUHANGAN HPS(IPP) (2*96) | 192 | 0 | 177 | 110 | 3.30 | 138 | 3.36 | | -0.06 |
| KARCHAM WANGTOO HPS(IPP) (4*250) | 1000 | 0 | 1100 | 1100 | 26.20 | 1091 | 26.08 | | 0.11 |
| Malana Stg-II HPS (2*50) | 100 | 0 | 112 | 0 | 2.35 | 98 | 2.45 | | -0.11 |
| Shree Cement TPS (2*150) | 300 | 0 | 261 | 170 | 4.39 | 183 | 4.52 | | -0.13 |
| Budhil HPS(IPP) (2*35) | 70 | 0 | 73 | 72 | 1.72 | 72 | 1.73 | | -0.01 |
| Sub Total (G) | 1662 | 0 | 1724 | 1452 | 37.95 | 1581 | 38.14 | | -0.19 |
| H. Total Regional Entities (A-G) | 25237 | 20700 | 21723 | 19173 | 459.63 | 19151 | 463.95 | | -4.32 |

| I. State Entities | Station | Effective Installed Capacity (MW) | Peak MW | Off Peak MW | Energy(MU) | Average(Sent out MW) | |
|---|---|-----------------------------------|--------------|--------------|----------------|----------------------|------|
| Punjab | Guru Gobind Singh TPS (Ropar) (6*210) | 1260 | 780 | 510 | 13.45 | 560 | |
| | Guru Nanak Dev TPS(Bhatinda) (2*110+2*120) | 460 | 95 | 95 | 2.16 | 90 | |
| | Guru Hargobind Singh TPS(L.mbt) (2*210+2*250) | 920 | 376 | 203 | 7.14 | 297 | |
| | Goindwal(GVK) (2*270) | 540 | 180 | 190 | 5.16 | 215 | |
| | Rajpura (2*700) | 1400 | 1220 | 1320 | 31.27 | 1303 | |
| | Talwandi Saboo (3*660) | 1980 | 950 | 1200 | 26.86 | 1119 | |
| | Thermal (Total) | 6560 | 3601 | 3518 | 86.03 | 3585 | |
| | Total Hydro | 1000 | 558 | 613 | 14.24 | 593 | |
| | Total Punjab | 7560 | 4159 | 4131 | 100.28 | 4178 | |
| | Haryana | Panipat TPS (2*210+2*250) | 920 | 409 | 414 | 9.92 | 413 |
| DCRTPP (Yamuna nagar) (2*300) | | 600 | 528 | 478 | 10.84 | 451 | |
| Faridabad GPS (NTPC)(2*137.75+1*156) | | 432 | 352 | 308 | 7.63 | 318 | |
| RGTPP (khedar) (IPP) (2*600) | | 1200 | 402 | 0 | 4.02 | 168 | |
| Magnum Diesel (IPP) | | 25 | 0 | 0 | 0.00 | 0 | |
| Jhajjar(CLP) (2*660) | | 1320 | 0 | 0 | 0.00 | 0 | |
| Thermal (Total) | | 4497 | 1691 | 1200 | 32.40 | 1350 | |
| Total Hydro | | 62 | 8 | 38 | 0.77 | 32 | |
| Total Haryana | | 4559 | 1699 | 1238 | 33.17 | 1382 | |
| Rajasthan | | kota TPS (2*110+2*195+3*210) | 1240 | 495 | 318 | 11.03 | 460 |
| | suratgarh TPS (6*250) | 1500 | 178 | 183 | 4.67 | 194 | |
| | Chabra TPS (4*250) | 1000 | 734 | 737 | 17.88 | 745 | |
| | 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 | 163 | 166 | 3.96 | 165 | |
| | RAPS A (NPC) (1*100+1*200) | 300 | 0 | 0 | 0.00 | 0 | |
| | Barsingar (NLC) (2*125) | 250 | 113 | 113 | 2.62 | 109 | |
| | Giral LTPS (2*125) | 250 | 0 | 0 | 0.00 | 0 | |
| | Rajwest LTPS (IPP) (8*135) | 1080 | 469 | 678 | 15.23 | 635 | |
| | VS LIGNITE LTPS (IPP) (1*135) | 135 | 0 | 0 | 0.00 | 0 | |
| | Kalisindh Thermal(2*600) | 1200 | 404 | 408 | 10.22 | 426 | |
| | Kawai(Adani) (2*660) | 1320 | 911 | 1026 | 27.19 | 1133 | |
| | Thermal (Total) | 8876 | 3467 | 3629 | 93 | 3866 | |
| | Total Hydro | 550 | 0 | 0 | 0.00 | 0 | |
| | Wind power | 3214 | 1567 | 1807 | 37.58 | 1566 | |
| | Biomass | 99 | 13 | 13 | 0.31 | 13 | |
| | Solar | 730 | 1 | 0 | 0.17 | 7 | |
| | Renewable/Others (Total) | 4043 | 1581 | 1820 | 38.05 | 1586 | |
| | Total Rajasthan | 13469 | 5048 | 5449 | 130.84 | 5452 | |
| | UP | Anpara TPS (3*210+2*500) | 1630 | 1316 | 1166 | 31.34 | 1306 |
| Obra TPS (2*50+2*94+5*200) | | 1194 | 363 | 357 | 8.56 | 357 | |
| Paricha TPS (2*110+2*220+2*250) | | 1160 | 613 | 591 | 13.95 | 581 | |
| Panki TPS (2*105) | | 210 | 126 | 117 | 2.90 | 121 | |
| Harduaganj TPS (1*60+1*105+2*250) | | 665 | 444 | 442 | 8.19 | 341 | |
| Tanda TPS (NTPC) (4*110) | | 440 | 270 | 281 | 6.60 | 275 | |
| Roza TPS (IPP) (4*300) | | 1200 | 842 | 824 | 19.23 | 801 | |
| Anpara-C (IPP) (2*600) | | 1200 | 1035 | 1080 | 25.18 | 1049 | |
| Bajaj Energy Pvt.Ltd(IPP) TPS (10*45) | | 450 | 0 | 0 | 0.00 | 0 | |
| Anpara-D(2*500) | | 1000 | 211 | 211 | 5.06 | 211 | |
| Lalitpur TPS(3*660) | | 1980 | 0 | 0 | 0.00 | 0 | |
| Bara(2*660) | | 1320 | 376 | 538 | 11.71 | 488 | |
| Thermal (Total) | | 12449 | 5596 | 5607 | 133 | 5530 | |
| Vishnuparyag HPS (IPP)(4*110) | | 440 | 326 | 435 | 10.18 | 424 | |
| Alaknanda(4*82.5) | | 330 | 341 | 341 | 8.19 | 341 | |
| Other Hydro | | 527 | 83 | 191 | 2.63 | 109 | |
| Cogeneration | | 981 | 50 | 50 | 1.20 | 50 | |
| Total UP | | 14727 | 6396 | 6624 | 155 | 6454 | |
| Uttarakhand | | Total Hydro | 1398 | 849 | 763 | 19.60 | 817 |
| | | Total Gas | 225 | 0 | 0 | 0.03 | 1 |
| | Total Uttarakhand | 1623 | 849 | 763 | 20 | 818 | |
| Delhi | Rajghat TPS (2*67.5) | 135 | 0 | 0 | 0.00 | 0 | |
| | Delhi Gas Turbine (6x30 + 3x34) | 282 | 102 | 101 | 2.44 | 101 | |
| | Pragati Gas Turbine (2x104+ 1x122) | 330 | 265 | 265 | 6.39 | 266 | |
| | Rithala GPS (3*36) | 95 | 0 | 0 | 0.00 | 0 | |
| | Bawana GPS (4*216+2*253) | 1370 | 250 | 50 | 4.36 | 182 | |
| | Badarpur TPS (NTPC) (3*95+2*210) | 705 | 330 | 330 | 7.66 | 319 | |
| | Thermal (Total) | 2917 | 947 | 746 | 20.84 | 868 | |
| | Total Delhi | 2917 | 947 | 746 | 20.84 | 868 | |
| HP | Baspa HPS (IPP) (3*100) | 300 | 330 | 330 | 7.88 | 329 | |
| | Malana HPS (IPP) (2*43) | 86 | 102 | 36 | 2.22 | 93 | |
| | Other Hydro | 878 | 602 | 599 | 14.16 | 590 | |
| | Total HP | 1264 | 1034 | 965 | 24.27 | 1011 | |
| J & K | Baglihar HPS (IPP) (3*150+2*150) | 750 | 733 | 733 | 17.59 | 733 | |
| | Other Hydro/IPP | 560 | 207 | 210 | 4.89 | 204 | |
| | Gas/Diesel/Others | 190 | 0 | 0 | 0.00 | 0 | |
| | Total J & K | 1500 | 940 | 943 | 22.48 | 937 | |
| Total State Control Area Generation | | 47619 | 21072 | 20859 | 506.41 | 21100 | |
| J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)] | | | 8493 | 9504 | 221.63 | 9235 | |
| Total Regional Availability(Gross) | | 72856 | 51288 | 49536 | 1187.67 | 49486 | |

| IV. Total Hydro Generation: | | | | | | |
|-----------------------------|--|--------------|--------------|--------------|---------------|--------------|
| Regional Entities Hydro | | 12234 | 11584 | 10048 | 251.18 | 10466 |
| State Control Area Hydro | | 7106 | 4139 | 4289 | 102.38 | 4266 |
| Total Regional Hydro | | 19340 | 15723 | 14337 | 353.56 | 14732 |

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

| Element | Peak(20:00 Hrs) | Off Peak(03:00 Hrs) | Maximum Interchange (MW) | | Energy (MU) | | Net Energy MU |
|-----------------------------------|-----------------|---------------------|--------------------------|--------|---------------|--------------|---------------|
| | MW | MW | Import | Export | Import | Export | |
| Vindhychal(HVDC B/B) | -250 | 250 | 250 | 250 | 5.25 | 0.53 | 4.72 |
| 765 KV Gwalior-Agra (D/C) | 2887 | 2420 | 3110 | 0 | 57.89 | 0.00 | 57.89 |
| 400 KV Zerda-Kankroli | 26 | -52 | 47 | 252 | 0.00 | 2.13 | -2.13 |
| 400 KV Zerda-Bhinmal | 23 | -61 | 198 | 222 | 0.00 | 1.77 | -1.77 |
| 220 KV Auraiya-Malanpur | -45 | -70 | 0 | 85 | 0.00 | 0.95 | -0.95 |
| 220 KV Badod-Kota/Morak | 98 | 152 | 101 | 0 | 2.80 | 0.00 | 2.80 |
| Mundra-Mohindergarh(HVDC Bipole) | 2498 | 2504 | 2507 | 0.00 | 60.44 | 0.00 | 60.44 |
| 400 KV Vindhychal - Rihand | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 765 kV Phagi-Gwalior (D/C) | 98 | 913 | 593 | 0 | 21.49 | 0.00 | 21.49 |
| Sub Total WR | 5335 | 6056 | | | 147.88 | 5.38 | 142.50 |
| Pusauli Bypass/HVDC | 400 | 400 | 400 | 0 | 8.94 | 0.00 | 8.94 |
| 400 KV MZP- GKP (D/C) | 252 | 484 | 624 | 0 | 10.21 | 0.00 | 10.21 |
| 400 KV Patna-Balia(D/C) X 2 | 691 | 750 | 835 | 0 | 17.66 | 0.00 | 17.66 |
| 400 KV B'Sharif-Balia (D/C) | 88 | 110 | 194 | 0 | 2.56 | 0.00 | 2.56 |
| 765 KV Gaya-Balia | 268 | 268 | 32 | 0 | 2.84 | 0.00 | 2.84 |
| 765 KV Gaya-Varanasi (D/C) | 566 | 515 | 669 | 0 | 11.59 | 0.00 | 11.59 |
| 220 KV Pusauli-Sahupuri | 189 | 205 | 238 | 0 | 4.67 | 0.00 | 4.67 |
| 132 KV K'nasa-Sahupuri | -28 | -30 | 0 | 40 | 0.00 | 0.61 | -0.61 |
| 132 KV Son Ngr-Rihand | -31 | -28 | 0 | 30 | 0.00 | 0.54 | -0.54 |
| 132 KV Garhwa-Rihand | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 765 KV Sasaram - Fatehpur | -206 | -216 | 0 | 339 | 0.00 | 4.12 | -4.12 |
| 400 KV Barh -GKP (D/C) | 512 | 510 | 548 | 0 | 10.96 | 0.00 | 10.96 |
| 400 kV B'Sharif - Varanasi (D/C) | -43 | -20 | 143 | 0 | 5.63 | 0.00 | 5.63 |
| Sub Total ER | 2658 | 2948 | | | 75.07 | 5.27 | 69.79 |
| +/- 800 KV BiswanathChariali-Agra | 500 | 500 | 500 | 0.00 | 9.34 | 0.00 | 9.34 |
| Sub Total NER | 500 | 500 | | | 9.34 | 0.00 | 9.34 |
| Total IR Exch | 8493 | 9504 | | | 232.28 | 10.65 | 221.63 |

V(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 |
| 44.47 | 4.04 | 48.50 | 10.78 | 20.17 | 14.56 | 5.36 | 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 |
| 73.84 | 141.76 | 215.60 | 79.13 | 142.50 | 221.63 | 5.29 | 0.74 | 6.03 |

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

| Element | Peak(20:00 Hrs) | Off Peak(03:00 Hrs) | Maximum Interchange (MW) | | Energy (MU) | | Net Energy MU |
|---------------------------------|-----------------|---------------------|--------------------------|--------|-------------|--------|---------------|
| | MW | MW | Import | Export | Import | Export | |
| 132 KV Tanakpur - Mahendarnagar | -28 | -17 | 0 | 29 | 0 | 1 | -0.55 |

VI. 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 | 1.62 | 38.02 | 76.09 | 20.68 | 1.63 | 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) | | |
| 50.14 | 6.02 | 49.86 | 0.38 | 50.01 | 0.022 | 0.046 | 50.18 | 50.02 | 23.91 |

VII. Voltage profile 400 kV

| Station | Voltage Level (kV) | Maximum | | Minimum | | Voltage (in % of Time) | | | | Voltage Deviat |
|-------------------|--------------------|-------------|-------|--------------|-------|------------------------|---------|---------|---------|----------------|
| | | Voltage(KV) | Time | Voltage (KV) | Time | <380 kV | <390 kV | >420 kV | >430 kV | |
| Rihand | 400 | 410 | 19:02 | 400 | 0:44 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Gorakhpur | 400 | 421 | 8:01 | 401 | 22:27 | 0.0 | 0.0 | 0.4 | 0.0 | 0.4 |
| Bareilly(PG)400kV | 400 | 0 | 0:00 | 0 | 0:00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kanpur | 400 | 414 | 18:29 | 395 | 22:24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dadri | 400 | 412 | 18:51 | 393 | 14:52 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Ballabgarh | 400 | 418 | 4:00 | 396 | 14:52 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bawana | 400 | 414 | 6:00 | 396 | 14:51 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bassi | 400 | 422 | 4:01 | 391 | 22:23 | 0.0 | 0.0 | 0.7 | 0.0 | 0.7 |
| Hissar | 400 | 413 | 18:51 | 391 | 19:51 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Moga | 400 | 408 | 6:02 | 393 | 11:56 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Abdullapur | 400 | 411 | 6:02 | 394 | 11:55 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Nalagarh | 400 | 414 | 6:00 | 396 | 14:45 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kishenpur | 400 | 404 | 2:44 | 395 | 11:52 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Wagoora | 400 | 404 | 1:31 | 389 | 10:47 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 |
| Amritsar | 400 | 411 | 4:00 | 394 | 14:52 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kashipur | 400 | 417 | 7:42 | 409 | 12:11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Hamirpur | 400 | 410 | 7:40 | 396 | 14:41 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Rishikesh | 400 | 409 | 18:44 | 389 | 12:23 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 |

VIII. Voltage profile 765 kV

| Station | Voltage Level (kV) | Maximum | | Minimum | | Voltage (in % of Time) | | | | Voltage Deviat |
|-----------------|--------------------|-------------|-------|--------------|-------|------------------------|---------|---------|---------|----------------|
| | | Voltage(KV) | Time | Voltage (KV) | Time | <728 kV | <742 kV | >800 kV | >820 kV | |
| Fatehpur | 765 | 779 | 8:02 | 739 | 22:27 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 |
| Balia | 765 | 794 | 7:56 | 760 | 22:25 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Moga | 765 | 793 | 6:02 | 760 | 19:51 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Agra | 765 | 791 | 18:47 | 746 | 19:52 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bhiwani | 765 | 798 | 6:02 | 763 | 14:53 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Unnao | 765 | 773 | 8:02 | 739 | 22:26 | 0.0 | 2.9 | 0.0 | 0.0 | 0.0 |
| Lucknow | 765 | 796 | 8:03 | 760 | 22:26 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Meerut | 765 | 803 | 18:51 | 763 | 19:53 | 0.0 | 0.0 | 1.5 | 0.0 | 1.5 |
| Jhatikara | 765 | 770 | 0:00 | 770 | 0:00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bareilly 765 kV | 765 | 784 | 18:44 | 753 | 22:25 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anta | 765 | 789 | 4:02 | 756 | 20:18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Phagi | 765 | 793 | 4:03 | 750 | 19:56 | 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 | 484.55 | 577.33 | 499.13 | 1064.89 | 1050.47 | 930.32 |
| Pong | 426.72 | 384.05 | 398.63 | 191.43 | 412.22 | 566.84 | 395.39 | 110.38 |
| Tehri | 829.79 | 740.04 | 780.80 | 330.56 | 778.05 | 297.05 | 516.73 | 560.00 |
| Koteswar | 612.50 | 598.50 | 609.39 | 4.21 | 610.44 | 4.79 | 560.00 | 519.51 |
| Chamera-I | 760.00 | 748.75 | 0.00 | 0.00 | 0.00 | 0.00 | 270.79 | 354.35 |
| 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 | 506.42 | 6.89 | 523.43 | 10.78 | 315.57 | 320.50 |

* 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 / PXIL (MU) | Total (MU) |
| Punjab | 1136 | 428 | 0 | 921 | 941 | 0 | 24.00 | 22.61 | 46.61 |
| Delhi | 496 | -89 | 0 | 769 | -270 | 0 | 18.05 | -3.22 | 14.83 |
| Haryana | 1881 | 392 | 0 | 1590 | 375 | 0 | 39.58 | 9.26 | 48.84 |
| HP | -1288 | -445 | 0 | -1014 | -538 | 0 | -26.51 | -11.52 | -38.03 |
| J&K | -870 | -151 | 0 | -653 | -15 | 0 | -17.99 | -1.37 | -19.36 |
| CHD | 0 | -40 | 0 | 0 | 0 | 0 | 0.35 | -0.10 | 0.26 |
| Rajasthan | -194 | 536 | 0 | -194 | 495 | 0 | -4.66 | 12.36 | 7.70 |
| UP | 915 | 0 | 0 | 602 | 0 | 0 | 15.44 | 0.00 | 15.44 |
| Uttarakhand | -348 | 221 | 0 | -348 | 306 | 0 | -8.36 | 6.34 | -2.01 |
| Total | 1729 | 851 | 0 | 1672 | 1294 | 0 | 39.91 | 34.36 | 74.27 |

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

| State | Bilateral (MW) | | IEX (MW) | | PXIL (MW) | |
|-------------|----------------|---------|----------|---------|-----------|---------|
| | Maximum | Minimum | Maximum | Minimum | Maximum | Minimum |
| Punjab | 1136 | 806 | 1183 | 428 | 0 | 0 |
| Delhi | 931 | 496 | 176 | -359 | 0 | 0 |
| Haryana | 1882 | 1420 | 429 | 184 | 0 | 0 |
| HP | -1012 | -1288 | -429 | -664 | 0 | 0 |
| J&K | -628 | -971 | 0 | -302 | 0 | 0 |
| CHD | 44 | 0 | 0 | -40 | 0 | 0 |
| Rajasthan | -194 | -194 | 539 | 491 | 0 | 0 |
| UP | 936 | 529 | 0 | 0 | 0 | 0 |
| Uttarakhand | -347 | -350 | 331 | 165 | 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 | 4.17% |
| ER | 0.00% |
| Simultaneous | 5.56% |

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

| | |
|--------------|--------|
| WR | 37.15% |
| ER | 0.00% |
| Simultaneous | 32.29% |

(iii)%age of times Angular Difference on Important Buses was beyond permissible limits(40 deg.)

| | |
|----------------|-------|
| Rihand - Dadri | 0.00% |
|----------------|-------|

XII. System Constraints:

XIII. Grid Disturbance / Any Other Significant Event:

0.00

XIV. Weather Conditions For 21.07.2016 :

XV. Synchronisation of new generating units :

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

- 315MVA ICT-1 & 2 at 400kV Srinagar(UK) first time charged on no-load at 2110 Hrs and 2115 Hrs respectively of 21.07.16
- 400kV Bus-1 & 2 at 400kV Srinagar(UK) first time charged at 2110 Hrs and 2116 Hrs respectively of 21.07.16
- 315MVA ICT-2 @ 400kV Muzaffarnagar replaced with old 240MVA ICT at 2240Hrs of 21.07.16

XVII. Tripping of lines in pooling stations :

XVIII. 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.