# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

**Power Supply Position in Northern Region for 26.06.2016**
**Date of Reporting : 27.06.2016**

**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 |
| 47394 | 1165 | 48558 | 50.08 | 48996 | 2233 | 51229 | 50.03 | 1139.8 | 25.90 |

* Half hourly (two 15 minutes block--one block each before and after the designated time) average frequency

**II. A. State's Load Details (At States periphery) in MUs:**

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

| State | State's Control Area Generation (Net MU) | | | | Drawal Schedule (Net MU) | Actual Drawal (Net MU) | UI (Net MU) | Consumption (Net MU) | Shortages * (MU) |
|---|---|---|---|---|---|---|---|---|---|
| | Thermal | Hydro | Renewable/others $ | Total | | | | | |
| **Punjab** | 103.09 | 14.75 | | 117.84 | 119.08 | 118.12 | -0.97 | 235.96 | 0.00 |
| **Haryana** | 55.46 | 0.76 | | 56.22 | 122.53 | 121.58 | -0.95 | 177.80 | 0.01 |
| **Rajasthan** | 120.11 | 0.00 | 9.28 | 129.39 | 61.32 | 62.29 | 0.97 | 191.68 | 0.39 |
| **Delhi** | 19.21 | | | 19.21 | 96.43 | 96.76 | 0.34 | 115.97 | 0.05 |
| **UP** | 132.84 | 21.60 | | 154.44 | 156.85 | 160.22 | 3.37 | 314.66 | 17.83 |
| **Uttarakhand** | | 19.55 | | 19.55 | 19.01 | 20.17 | 1.15 | 39.72 | 0.06 |
| **HP** | | 19.61 | | 19.61 | 4.87 | 6.36 | 1.49 | 25.97 | 0.00 |
| **J & K** | | 18.32 | 0.00 | 18.32 | 18.57 | 13.85 | -4.73 | 32.16 | 7.56 |
| **Chandigarh** | | | | 0.00 | 5.69 | 5.84 | 0.27 | 5.84 | 0.00 |
| **Total** | **430.71** | **94.60** | **9.28** | **534.59** | **604.35** | **605.19** | **0.95** | **1139.77** | 25.90 |

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

**II. B. State's Demand Met in MWs:**

UI/OA/PX [OD/Import: (+ve), UD/Export: (-ve)]

| State | Evening Peak (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** | 9889 | 0 | -174 | 1666 | 9640 | 0 | 29 | 1434 | 10143 | 22:00 | 0 |
| **Haryana** | 7648 | 0 | -251 | 1261 | 8075 | 0 | 53 | 1464 | 8381 | 21:00 | 0 |
| **Rajasthan** | 7252 | 0 | -90 | 80 | 8264 | 0 | 11 | 93 | 8595 | 1:00 | 0 |
| **Delhi** | 4527 | 0 | -121 | 466 | 5180 | 0 | 130 | 743 | 5688 | 24:00 | 3 |
| **UP** | 13422 | 710 | 139 | 1170 | 13301 | 1850 | 188 | 1270 | 13454 | 23:00 | 2170 |
| **Uttarakhand** | 1785 | 40 | 93 | 174 | 1714 | 0 | 110 | 46 | 1824 | 21:00 | 80 |
| **HP** | 950 | 0 | 32 | -1351 | 1034 | 0 | 12 | -1422 | 1189 | 12:00 | 0 |
| **J&K** | 1659 | 415 | -72 | -364 | 1533 | 383 | 36 | -548 | 1659 | 20:00 | 415 |
| **Chandigarh** | 262 | 0 | 4 | 0 | 254 | 0 | 24 | 0 | 298 | 22:00 | 0 |
| **Total** | **47394** | **1165** | **-441** | **3103** | **48996** | **2233** | **593** | **3079** | **50324** | **23:00** | **2564** |

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

Diversity is 1.02

**III. Regional Entities :**

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

| | 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 | 1890 | 2070 | 2055 | 45.82 | 1909 | 45.31 | 0.51 |
| | Rihand I STPS (2*500) | 1000 | 426 | 520 | 480 | 10.24 | 427 | 10.12 | 0.11 |
| | Rihand II STPS (2*500) | 1000 | 946 | 1012 | 1023 | 22.71 | 946 | 22.47 | 0.24 |
| | Rihand III STPS (2*500) | 1000 | 943 | 1001 | 1000 | 22.24 | 927 | 22.37 | -0.13 |
| | Dadri I STPS (4*210) | 840 | 805 | 390 | 401 | 8.31 | 346 | 8.81 | -0.51 |
| | Dadri II STPS (2*490) | 980 | 960 | 721 | 940 | 18.30 | 762 | 19.59 | -1.29 |
| | Unchahar I TPS (2*210) | 420 | 346 | 358 | 349 | 7.15 | 298 | 7.92 | -0.77 |
| | Unchahar II TPS (2*210) | 420 | 400 | 406 | 420 | 8.16 | 340 | 8.97 | -0.81 |
| | Unchahar III TPS (1*210) | 210 | 200 | 201 | 205 | 4.06 | 169 | 4.49 | -0.43 |
| | ISTPP (Jhajjhar) (3*500) | 1500 | 1425 | 1178 | 1176 | 24.48 | 1020 | 25.31 | -0.83 |
| | Dadri GPS (4*130.19+2*154.51) | 830 | 786 | 186 | 182 | 4.16 | 173 | 4.27 | -0.11 |
| | Anta GPS (3*88.71+1*153.2) | 419 | 398 | 0 | 0 | 0.00 | 0 | 0.00 | 0.00 |
| | Auraiya GPS (4*111.19+2*109.30) | 663 | 631 | 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 | 0.04 | 2 | 0.03 | 0.01 |
| | Singrauli Solar(15) | 15 | 2 | 0 | 0 | 0.06 | 2 | 0.06 | 0.00 |
| | KHEP(4*200) | 800 | 855 | 852 | 852 | 20.55 | 856 | 20.52 | 0.03 |
| | **Sub Total (A)** | **12112** | **11017** | **8895** | **9083** | **196** | **8179** | **200** | **-3.98** |
| **B. NPC** | NAPS (2*220) | 440 | 377 | 417 | 423 | 9.07 | 378 | 9.05 | 0.02 |
| | RAPS- B (2*220) | 440 | 370 | 411 | 417 | 8.91 | 371 | 8.88 | 0.03 |
| | RAPS- C (2*220) | 440 | 410 | 433 | 445 | 9.41 | 392 | 9.84 | -0.43 |
| | **Sub Total (B)** | **1320** | **1157** | **1261** | **1285** | **27.39** | **1141** | **27.77** | **-0.38** |
| **C. NHPC** | Chamera I HPS (3*180) | 540 | 540 | 548 | 182 | 10.17 | 424 | 10.00 | 0.17 |
| | Chamera II HPS (3*100) | 300 | 58 | 200 | 0 | 1.55 | 65 | 1.37 | 0.18 |
| | Chamera III HPS (3*77) | 231 | 8 | 0 | 0 | 0.27 | 11 | 0.18 | 0.09 |
| | Bairasuil HPS(3*60) | 180 | 120 | 122 | 122 | 2.23 | 93 | 2.16 | 0.07 |
| | Salal-HPS (6*115) | 690 | 227 | 0 | 663 | 5.47 | 228 | 5.44 | 0.03 |
| | Tanakpur-HPS (3*31.4) | 94 | 72 | 92 | 42 | 1.89 | 79 | 1.71 | 0.18 |
| | Uri-I HPS (4*120) | 480 | 475 | 476 | 474 | 11.54 | 481 | 11.40 | 0.15 |
| | Uri-II HPS (4*60) | 240 | 237 | 239 | 239 | 5.69 | 237 | 5.54 | 0.15 |
| | Dhauliganga-HPS (4*70) | 280 | 280 | 289 | 281 | 5.89 | 245 | 5.83 | 0.06 |
| | Dulhasti-HPS (3*130) | 390 | 258 | 273 | 267 | 6.31 | 263 | 6.19 | 0.12 |
| | Sewa-II HPS (3*40) | 120 | 119 | 127 | 0 | 0.51 | 21 | 0.50 | 0.00 |
| | Parbati 3 (4*130) | 520 | 390 | 394 | 126 | 3.71 | 154 | 3.63 | 0.07 |
| | **Sub Total (C )** | **4065** | **2785** | **2759** | **2396** | **55** | **2302** | **54** | **1.27** |
| **D.SJVNL** | NJPC (6*250) | 1500 | 1605 | 1627 | 1618 | 38.52 | 1605 | 38.52 | 0.01 |
| | Rampur HEP (6*68.67) | 412 | 442 | 372 | 447 | 10.26 | 427 | 10.61 | -0.35 |
| | **Sub Total (D)** | **1912** | **2047** | **1999** | **2065** | **48.78** | **2033** | **49.13** | **-0.35** |
| **E. THDC** | Tehri HPS (4*250) | 1000 | 568 | 582 | 424 | 6.30 | 263 | 6.00 | 0.30 |
| | Koteshwar HPS (4*100) | 400 | 135 | 398 | 92 | 3.29 | 137 | 3.25 | 0.04 |
| | **Sub Total (E)** | **1400** | **703** | **980** | **516** | **9.59** | **400** | **9.25** | **0.34** |
| **F. BBMB** | Bhakra HPS (2*108+3*126+5*157) | 1379 | 1055 | 1293 | 900 | 25.39 | 1058 | 25.33 | 0.06 |
| | Dehar HPS (6*165) | 990 | 617 | 825 | 495 | 14.82 | 618 | 14.82 | 0.00 |
| | Pong HPS (6*66) | 396 | 62 | 144 | 0 | 1.42 | 59 | 1.48 | -0.05 |
| | **Sub Total (F)** | **2765** | **1734** | **2262** | **1395** | **41.63** | **1735** | **41.62** | **0.01** |
| **G. IPP(s)/JV(s)** | ALLAIN DUHANGAN HPS(IPP) (2*96) | 192 | 0 | 182 | 142 | 3.58 | 149 | 3.45 | 0.12 |
| | KARCHAM WANGTOO HPS(IPP) (4*250) | 1000 | 0 | 1100 | 1100 | 26.24 | 1093 | 26.13 | 0.10 |
| | Malana Stg-II HPS (2*50) | 100 | 0 | 57 | 111 | 1.54 | 64 | 1.51 | 0.03 |
| | Shree Cement TPS (2*150) | 300 | 0 | 269 | 283 | 6.60 | 275 | 6.59 | 0.02 |
| | Budhil HPS(IPP) (2*35) | 70 | 0 | 38 | 38 | 0.89 | 37 | 0.90 | -0.01 |
| | **Sub Total (G )** | **1662** | **0** | **1645** | **1674** | **38.85** | **1619** | **38.59** | **0.27** |
| **H. Total Regional Entities (A-G)** | | **25237** | **19444** | **19801** | **18413** | **417.77** | **17407** | **420.59** | **-2.81** |

| 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 | 1050 | 1050 | 22.46 | 936 |
| | Guru Nanak Dev TPS(Bhatinda) (2*110+2*120) | 460 | 330 | 330 | 6.65 | 277 |
| | Guru Hargobind Singh TPS(L.mbt) (2*210+2*250) | 920 | 890 | 943 | 19.56 | 815 |
| | Goindwal(GVK) (2*270) | 540 | 0 | 0 | -0.03 | -1 |
| | Rajpura (2*700) | 1400 | 1320 | 1320 | 30.62 | 1276 |
| | Talwandi Saboo (3*660) | 1980 | 950 | 1100 | 23.83 | 993 |
| | **Thermal (Total)** | **6560** | **4540** | **4743** | **103.09** | **4295** |
| | Total Hydro | 1000 | 638 | 628 | 14.75 | 615 |
| | **Total Punjab** | **7560** | **5178** | **5371** | **117.84** | **4910** |
| **Haryana** | Panipat TPS (2*210+2*250) | 920 | 799 | 574 | 16.96 | 707 |
| | DCRTPP (Yamuna nagar) (2*300) | 600 | 546 | 560 | 12.10 | 504 |
| | Faridabad GPS (NTPC)(2*137.75+1*156) | 432 | 182 | 188 | 4.06 | 169 |
| | RGTPP (khedar) (IPP) (2*600) | 1200 | 422 | 566 | 11.17 | 465 |
| | Magnum Diesel (IPP) | 25 | 0 | 0 | 0.00 | 0 |
| | Jhajjar(CLP) (2*660) | 1320 | 449 | 603 | 11.17 | 465 |
| | **Thermal (Total)** | **4497** | **2398** | **2491** | **55.46** | **2311** |
| | Total Hydro | 62 | 31 | 25 | 0.76 | 32 |
| | **Total Haryana** | **4559** | **2429** | **2516** | **56.22** | **2342** |
| **Rajasthan** | kota TPS (2*110+2*195+3*210) | 1240 | 972 | 961 | 23.50 | 979 |
| | suratgarh TPS (6*250) | 1500 | 825 | 958 | 18.33 | 764 |
| | Chabra TPS (4*250) | 1000 | 371 | 426 | 9.18 | 383 |
| | Dholpur GPS (3*110) | 330 | 85 | 77 | 2.19 | 91 |
| | Ramgarh GPS(1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50) | 271 | 136 | 142 | 3.46 | 144 |
| | RAPS A (NPC) (1*100+1*200) | 300 | 136 | 137 | 3.43 | 143 |
| | Barsingsar (NLC) (2*125) | 250 | 188 | 171 | 4.34 | 181 |
| | Giral LTPS (2*125) | 250 | 0 | 0 | 0.00 | 0 |
| | Rajwest LTPS (IPP) (8*135) | 1080 | 599 | 843 | 18.88 | 787 |
| | VS LIGNITE LTPS (IPP) (1*135) | 135 | 0 | 0 | 0.00 | 0 |
| | Kalisindh Thermal(2*600) | 1200 | 406 | 536 | 9.18 | 383 |
| | Kawai(Adani) (2*660) | 1320 | 895 | 1199 | 27.62 | 1151 |
| | **Thermal (Total)** | **8876** | **4613** | **5450** | **120** | **5005** |
| | Total Hydro | 550 | 0 | 0 | 0.00 | 0 |
| | Wind power | 3214 | 37 | 201 | 6.50 | 271 |
| | Biomass | 99 | 21 | 21 | 0.50 | 21 |
| | Solar | 730 | 1 | 0 | 2.27 | 95 |
| | Renewable/Others (Total) | 4043 | 59 | 222 | 9.28 | 387 |
| | **Total Rajasthan** | **13469** | **4672** | **5672** | **129.39** | **5391** |
| **UP** | Anpara TPS (3*210+2*500) | 1630 | 1360 | 1374 | 32.60 | 1358 |
| | Obra TPS (2*50+2*94+5*200) | 1194 | 287 | 363 | 9.40 | 392 |
| | Paricha TPS (2*110+2*220+2*250) | 1160 | 964 | 957 | 23.60 | 983 |
| | Panki TPS (2*105) | 210 | 0 | 0 | 0.00 | 0 |
| | Harduaganj TPS (1*60+1*105+2*250) | 665 | 444 | 443 | 10.70 | 446 |
| | Tanda TPS (NTPC) (4*110) | 440 | 380 | 380 | 9.24 | 385 |
| | Roza TPS (IPP) (4*300) | 1200 | 563 | 555 | 13.00 | 542 |
| | Anpara-C (IPP) (2*600) | 1200 | 1080 | 1080 | 25.90 | 1079 |
| | Bajaj Energy Pvt.Ltd(IPP) TPS (10*45) | 450 | 0 | 0 | 0.00 | 0 |
| | Anpara-D(2*500) | 1000 | 221 | 208 | 6.00 | 250 |
| | Lalitpur TPS(3*660) | 1980 | 0 | 0 | 0.00 | 0 |
| | Bara(2*660) | 1320 | 0 | 0 | 0.00 | 0 |
| | **Thermal (Total)** | **12449** | **5299** | **5360** | **130** | **5435** |
| | Vishnuparyag HPS (IPP)(4*110) | 440 | 435 | 435 | 10.50 | 438 |
| | Alaknanada(4*82.5) | 330 | 325 | 331 | 8.10 | 338 |
| | Other Hydro | 527 | 161 | 183 | 3.00 | 125 |
| | Cogeneration | 981 | 100 | 100 | 2.40 | 100 |
| | **Total UP** | **14727** | **6320** | **6409** | **154** | **6435** |
| **Uttarakhand** | Total Hydro | 1398 | 839 | 742 | 19.55 | 815 |
| | Total Gas | 225 | 0 | 0 | 0.00 | 0 |
| | **Total Uttarakhand** | **1623** | **839** | **742** | **20** | **815** |
| **Delhi** | Rajghat TPS (2*67.5) | 135 | 0 | 0 | 0.00 | 0 |
| | Delhi Gas Turbine (6x30 + 3x34) | 282 | 143 | 143 | 3.54 | 147 |
| | Pragati Gas Turbine (2x104+ 1x122) | 330 | 265 | 261 | 6.46 | 269 |
| | Rithala GPS (3*36) | 95 | 0 | 0 | 0.00 | 0 |
| | Bawana GPS (4*216+2*253) | 1370 | 254 | 0 | 2.15 | 90 |
| | Badarpur TPS (NTPC) (3*95+2*210) | 705 | 322 | 327 | 7.07 | 294 |
| | Thermal (Total) | 2917 | 984 | 731 | 19.21 | 801 |
| | **Total Delhi** | **2917** | **984** | **731** | **19.21** | **801** |
| **HP** | Baspa HPS (IPP) (3*100) | 300 | 327 | 327 | 7.81 | 326 |
| | Malana HPS (IPP) (2*43) | 86 | 56 | 72 | 1.56 | 65 |
| | Other Hydro | 878 | 422 | 438 | 10.24 | 427 |
| | **Total HP** | **1264** | **805** | **837** | **19.61** | **817** |
| **J & K** | Baglihar HPS (IPP) (3*150+2*150) | 750 | 585 | 585 | 14.04 | 585 |
| | Other Hydro/IPP | 560 | 184 | 176 | 4.28 | 178 |
| | Gas/Diesel/Others | 190 | 0 | 0 | 0.00 | 0 |
| | **Total J & K** | **1500** | **769** | **761** | **18.32** | 763 |
| **Total State Control Area Generation** | | **47619** | **21996** | **23039** | **534.59** | **22274** |
| **J. Net Inter Regional Exchange** [Import (+ve)/Export (-ve)] | | | **9066** | **9280** | **211.46** | **8811** |
| **Total Regional Availability(Gross)** | | **72856** | **50863** | **50732** | **1163.82** | **48493** |

**IV. Total Hydro Generation:**

| | | | | | | |
|---|---|---|---|---|---|---|
| **Regional Entities Hydro** | | **12234** | **10190** | **8576** | **207.15** | **8631** |
| **State Control Area Hydro** | | **7106** | **4003** | **3942** | **95** | **3942** |
| **Total Regional Hydro** | | **19340** | **14193** | **12518** | **301.74** | **12573** |

**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 |
|---|---|---|---|---|---|---|---|
| | MW | MW | Import | Export | Import | Export | MU |
| Vindhychal(HVDC B/B) | 250 | 250 | 250 | 0 | 4.79 | 0.00 | 4.79 |
| 765 KV Gwalior-Agra (D/C) | 2631 | 3033 | 3033 | 0 | 60.74 | 0.00 | 60.74 |
| 400 KV Zerda-Kankroli | -48 | -109 | 0 | 298 | 0.00 | 3.44 | -3.44 |
| 400 KV Zerda-Bhinmal | 11 | -76 | 24 | 254 | 0.00 | 2.33 | -2.33 |
| 220 KV Auraiya-Malanpur | 34 | 36 | 34 | 0 | 0.74 | 0.00 | 0.74 |
| 220 KV Badod-Kota/Morak | -4 | 9 | 35 | -84 | -0.19 | 0.00 | -0.19 |
| Mundra-Mohindergarh(HVDC Bipole) | 2499 | 2498 | 2507 | 0.00 | 58.08 | 0.00 | 58.08 |
| 400 KV Vindhyachal - Rihand | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 765 kV Phagi-Gwalior (D/C) | 1185 | 1192 | 1338 | 825 | 27.62 | 0.00 | 27.62 |
| **Sub Total WR** | **6558** | **6833** | | | **151.78** | **5.77** | **146.01** |
| Pusauli Bypass/HVDC | 200 | 200 | 200 | 0 | 4.13 | 0.00 | 4.13 |
| 400 KV MZP- GKP (D/C) | 249 | 347 | 467 | 0 | 8.44 | 0.00 | 8.44 |
| 400 KV Patna-Balia(D/C) X 2 | 557 | 647 | 747 | 0 | 15.45 | 0.00 | 15.45 |
| 400 KV B'Sharif-Balia (D/C) | 94 | 71 | 176 | 0 | 2.62 | 0.00 | 2.62 |
| 765 KV Gaya-Balia | 324 | 228 | 324 | 0 | 3.33 | 0.00 | 3.33 |
| 765 KV Gaya-Varanasi (D/C) | 357 | 276 | 438 | 0 | 7.41 | 0.00 | 7.41 |
| 220 KV Pusauli-Sahupuri | -140 | -180 | 207 | 0 | 4.13 | 0.00 | 4.13 |
| 132 KV K'nasa-Sahupuri | 0 | -36 | 0 | 36 | 0.00 | 0.56 | -0.56 |
| 132 KV Son Ngr-Rihand | -8 | -26 | 0 | 33 | 0.00 | 0.42 | -0.42 |
| 132 KV Garhwa-Rihand | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 765 KV Sasaram - Fatehpur | -159 | -128 | 0 | 181 | 0.00 | 2.51 | -2.51 |
| 400 KV Barh -GKP (D/C) | 534 | 548 | 562 | 0 | 11.94 | 0.00 | 11.94 |
| 400 kV B'Sharif - Varanasi (D/C) | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| **Sub Total ER** | **2008** | **1947** | | | **57.46** | **3.48** | **53.98** |
| +/- 800 KV BiswanathCharialli-Agra | 500 | 500 | 500 | 0.00 | 11.48 | 0.00 | 11.48 |
| **Sub Total NER** | **500** | **500** | | | **11.48** | **0.00** | **11.48** |
| **Total IR Exch** | **9066** | **9280** | | | **220.71** | **9.25** | **211.46** |

**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 |
| 41.40 | 2.79 | 44.19 | 8.01 | 24.45 | 15.33 | 3.35 | 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 |
| 67.52 | 138.42 | 205.95 | 65.46 | 146.01 | 211.46 | -2.07 | 7.58 | 5.51 |

**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 |
|---|---|---|---|---|---|---|---|
| | MW | MW | Import | Export | Import | Export | MU |
| 132 KV Tanakpur - Mahendarnagar | -30 | -23 | 0 | 31 | 0 | 1 | -0.61 |

**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 | 0.96 | 7.55 | 52.11 | 74.81 | 14.44 | 3.25 | 0.00 | 0.00 |

| <---------- Frequency (Hz) ----------> | | | | Average | Frequency | Std. Dev. | Frequency in 15 Min Block | | Freq Dev Index (% of Time) |
|---|---|---|---|---|---|---|---|---|---|
| Maximum | | Minimum | | Frequency | Variation | | MAX | MIN | |
| Freq | Time | Freq | Time | Hz | Index | | (Hz) | (Hz) | |
| 50.16 | 6.02 | 49.71 | 19.39 | 49.99 | 0.042 | 0.064 | 50.19 | 49.90 | 25.19 |

**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 | 406 | 9:30 | 401 | 19:17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Gorakhpur | 400 | 420 | 8:02 | 397 | 22:13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bareilly(PG)400kV | 400 | 414 | 7:18 | 393 | 22:11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kanpur | 400 | 415 | 6:02 | 399 | 22:07 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dadri | 400 | 415 | 8:01 | 396 | 22:09 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Ballabhgarh | 400 | 423 | 6:02 | 399 | 22:10 | 0.0 | 0.0 | 6.3 | 0.0 | 6.3 |
| Bawana | 400 | 416 | 7:18 | 398 | 22:07 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bassi | 400 | 420 | 6:01 | 397 | 22:10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Hissar | 400 | 414 | 8:01 | 395 | 22:10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Moga | 400 | 412 | 8:01 | 396 | 20:11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Abdullapur | 400 | 0 | 0:00 | 0 | 0:00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Nalagarh | 400 | 420 | 8:01 | 404 | 0:06 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kishenpur | 400 | 416 | 8:20 | 391 | 20:26 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Wagoora | 400 | 408 | 8:01 | 380 | 21:07 | 0.0 | 13.0 | 0.0 | 0.0 | 0.0 |
| Amritsar | 400 | 421 | 6:31 | 402 | 20:00 | 0.0 | 0.0 | 0.3 | 0.0 | 0.3 |
| Kashipur | 400 | 418 | 7:18 | 407 | 21:23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Hamirpur | 400 | 394 | 0:00 | 394 | 0:00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Rishikesh | 400 | 429 | 7:18 | 401 | 21:25 | 0.0 | 0.0 | 22.2 | 0.0 | 22.2 |

**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 | 789 | 8:04 | 751 | 22:08 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Balia | 765 | 783 | 8:04 | 745 | 22:11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Moga | 765 | 793 | 8:01 | 759 | 20:28 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Agra | 765 | 791 | 6:05 | 753 | 22:08 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bhiwani | 765 | 795 | 6:05 | 761 | 22:10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Unnao | 765 | 770 | 8:02 | 737 | 22:10 | 0.0 | 13.7 | 0.0 | 0.0 | 0.0 |
| Lucknow | 765 | 792 | 8:01 | 752 | 22:10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Meerut | 765 | 806 | 8:01 | 768 | 22:09 | 0.0 | 0.0 | 6.3 | 0.0 | 6.3 |
| Jhatikara | 765 | 791 | 8:01 | 754 | 22:10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bareilly 765 kV | 765 | 0 | 0:00 | 0 | 0:00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anta | 765 | 790 | 18:33 | 760 | 23:47 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Phagi | 765 | 792 | 18:33 | 746 | 16:13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

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

**IX. Reservior Parameters:**

| Name of Reservior | 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 | 479.61 | 454.47 | 488.44 | 680.71 | 1024.47 | 962.77 |
| Pong | 426.72 | 384.05 | 391.13 | 67.89 | 406.14 | 370.28 | 251.06 | 121.82 |
| Tehri | 829.79 | 740.04 | 750.90 | 55.83 | 746.50 | 34.10 | 356.19 | 225.00 |
| Koteshwar | 612.50 | 598.50 | 610.09 | 4.44 | 610.18 | 4.65 | 225.00 | 216.91 |
| Chamera-I | 760.00 | 748.75 | 751.95 | 0.00 | 0.00 | 0.00 | 279.79 | 277.15 |
| 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 | 503.73 | 6.92 | 523.03 | 9.44 | 194.06 | 326.10 |

*** 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** | 680 | 754 | 0 | 1045 | 620 | 0 | 23.29 | 19.72 | 43.01 |
| **Delhi** | 511 | 232 | 0 | 654 | -187 | 0 | 14.81 | 1.02 | 15.83 |
| **Haryana** | 1165 | 299 | 0 | 1059 | 202 | 0 | 25.45 | 5.20 | 30.65 |
| **HP** | -1131 | -291 | 0 | -879 | -472 | 0 | -23.07 | -8.67 | -31.74 |
| **J&K** | -623 | 74 | 0 | -572 | 208 | 0 | -16.53 | 2.29 | -14.23 |
| **CHD** | 0 | 0 | 0 | 0 | 0 | 0 | 0.35 | 0.00 | 0.35 |
| **Rajasthan** | -414 | 507 | 0 | -414 | 494 | 0 | -9.93 | 11.91 | 1.98 |
| **UP** | 1270 | 0 | 0 | 1170 | 0 | 0 | 27.33 | 0.00 | 27.33 |
| **Uttarakhand** | 44 | 2 | 0 | 46 | 128 | 0 | 1.06 | 0.72 | 1.78 |
| **Total** | **1503** | **1576** | **0** | **2110** | **993** | **0** | **42.77** | **32.19** | **74.96** |

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

| State | Bilateral (MW) | | IEX (MW) | | PXIL (MW) | |
|---|---|---|---|---|---|---|
| | Maximum | Minimum | Maximum | Minimum | Maximum | Minimum |
| **Punjab** | 1425 | 680 | 1251 | 620 | 0 | 0 |
| **Delhi** | 745 | 511 | 604 | -286 | 0 | 0 |
| **Haryana** | 1291 | 857 | 310 | 12 | 0 | 0 |
| **HP** | -875 | -1132 | -277 | -594 | 0 | 0 |
| **J&K** | -572 | -850 | 223 | -166 | 0 | 0 |
| **CHD** | 44 | 0 | 0 | 0 | 0 | 0 |
| **Rajasthan** | -414 | -414 | 509 | 486 | 0 | 0 |
| **UP** | 1389 | 1005 | 0 | 0 | 0 | 0 |
| **Uttarakhand** | 46 | 42 | 130 | 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** | **6.94%** |
| **ER** | **0.00%** |
| **Simultaneous** | **16.67%** |

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

| | |
|---|---|
| **WR** | **54.17%** |
| **ER** | **0.00%** |
| **Simultaneous** | **64.93%** |

(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 26.06.2016 :**

**XV. Synchronisation of new generating units :**

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

*0.00*

**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.

**Report for : 26.06.2016**

**पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**