

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(भारत सरकार का उद्यम)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 25.03.2017

Date of Reporting : 26.03.2017



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 |
| 39311 | 466 | 39777 | 50.00 | 34496 | 502 | 34998 | 50.01 | 906.61 | 10.62 |

* 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 | 62.32 | 2.80 | 0.26 | 65.37 | 59.83 | 59.44 | -0.39 | 124.81 | 0.00 |
| Haryana | 14.26 | 0.44 | 0.00 | 14.71 | 106.95 | 105.72 | -1.23 | 120.44 | 0.00 |
| Rajasthan | 107.83 | 2.29 | 10.79 | 120.91 | 64.31 | 64.32 | 0.01 | 185.23 | 0.00 |
| Delhi | 11.53 | | 0.00 | 11.53 | 57.14 | 55.32 | -1.82 | 66.85 | 0.13 |
| UP | 173.46 | 4.33 | 0.00 | 177.79 | 125.91 | 127.49 | 1.57 | 305.28 | 0.00 |
| Uttarakhand | | 6.99 | 0.00 | 14.01 | 21.54 | 20.76 | -0.78 | 34.77 | 0.09 |
| HP | | 7.10 | 3.88 | 7.10 | 16.71 | 17.14 | 0.43 | 24.24 | 0.03 |
| J & K | | 9.97 | 0.00 | 9.97 | 32.95 | 31.52 | -1.43 | 41.49 | 10.37 |
| Chandigarh | | | | 0.00 | 3.71 | 3.51 | -0.21 | 3.51 | 0.00 |
| Total | 369.42 | 33.91 | 14.93 | 421.39 | 489.06 | 485.21 | -3.84 | 906.61 | 10.62 |

* Shortage furnished by the respective constituent's 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 (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 | 5633 | 0 | -278 | -303 | 4299 | 0 | 165 | -101 | 6222 | 20:00 | 0 |
| Haryana | 5701 | 0 | 75 | 172 | 3797 | 0 | 134 | -143 | 5945 | 20:00 | 0 |
| Rajasthan | 7104 | 0 | 16 | 382 | 7544 | 0 | -112 | 434 | 8643 | 8:00 | 0 |
| Delhi | 3085 | 0 | -214 | -139 | 2204 | 0 | -27 | -605 | 3331 | 20:00 | 0 |
| UP | 13100 | 0 | 98 | 538 | 12817 | 90 | -100 | 605 | 13951 | 20:00 | 0 |
| Uttarakhand | 1655 | 0 | 49 | 290 | 1312 | 0 | 22 | 256 | 1767 | 20:00 | 0 |
| HP | 984 | 0 | -57 | -221 | 773 | 0 | 123 | 161 | 1286 | 8:00 | 0 |
| J&K | 1865 | 466 | -6 | 284 | 1648 | 412 | -58 | 372 | 1993 | 7:00 | 498 |
| Chandigarh | 184 | 0 | -28 | 0 | 102 | 0 | 4 | -15 | 184 | 19:00 | 0 |
| Total | 39311 | 466 | -345 | 1001 | 34496 | 502 | 151 | 963 | 42767 | 20:00 | 482 |

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

Diversity is 1.01

UI [OD:(+ve), UD: (-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 | Net MU |
| A. NTPC | | | | | | | | | |
| Singrauli STPS (5*200+2*500) | 2000 | 1816 | 1975 | 1850 | 43.92 | 1830 | 43.50 | 0.42 | |
| Rihand I STPS (2*500) | 1000 | 923 | 1005 | 990 | 21.51 | 896 | 21.66 | -0.15 | |
| Rihand II STPS (2*500) | 1000 | 951 | 1020 | 1012 | 22.47 | 936 | 21.85 | 0.62 | |
| Rihand III STPS (2*500) | 1000 | 955 | 1029 | 1012 | 22.39 | 933 | 22.36 | 0.03 | |
| Dadri I STPS (4*210) | 840 | 815 | 339 | 331 | 8.18 | 341 | 8.69 | -0.50 | |
| Dadri II STPS (2*490) | 980 | 490 | 375 | 332 | 8.61 | 359 | 9.10 | -0.49 | |
| Unchahar I TPS (2*210) | 420 | 407 | 326 | 421 | 7.85 | 327 | 8.21 | -0.36 | |
| Unchahar II TPS (2*210) | 420 | 405 | 322 | 433 | 7.56 | 315 | 7.85 | -0.29 | |
| Unchahar III TPS (1*210) | 210 | 203 | 166 | 206 | 3.83 | 159 | 3.97 | -0.14 | |
| ISTPP (Jhajjar) (3*500) | 1500 | 1440 | 844 | 653 | 18.15 | 756 | 18.53 | -0.38 | |
| Dadri GPS (4*130.19+2*154.51) | 830 | 394 | 244 | 263 | 5.94 | 247 | 6.26 | -0.33 | |
| Anta GPS (3*88.71+1*153.2) | 419 | 262 | 0 | 0 | 0.00 | 0 | 0.01 | -0.01 | |
| Auraiya GPS (4*111.19+2*109.30) | 663 | 644 | 0 | 0 | 0.00 | 0 | 0.00 | 0.00 | |
| Dadri Solar(5) | 5 | 1 | 0 | 0 | 0.00 | 0 | 0.03 | -0.03 | |
| Unchahar Solar(10) | 10 | 2 | 0 | 0 | 0.05 | 2 | 0.05 | 0.00 | |
| Singrauli Solar(15) | 15 | 3 | 0 | 0 | 0.06 | 2 | 0.06 | -0.01 | |
| KHEP(4*200) | 800 | 872 | 871 | 0 | 2.61 | 109 | 2.62 | -0.01 | |
| Sub Total (A) | 12112 | 10581 | 8516 | 7503 | 173 | 7213 | 175 | -1.62 | |
| B. NPC | | | | | | | | | |
| NAPS (2*220) | 440 | 405 | 433 | 440 | 9.61 | 400 | 9.72 | -0.12 | |
| RAPS- B (2*220) | 440 | 376 | 415 | 421 | 8.97 | 374 | 9.02 | -0.06 | |
| RAPS- C (2*220) | 440 | 210 | 231 | 234 | 4.86 | 203 | 5.04 | -0.18 | |
| Sub Total (B) | 1320 | 991 | 1079 | 1095 | 23.44 | 977 | 23.78 | -0.35 | |
| C. NHPC | | | | | | | | | |
| Chamera I HPS (3*180) | 540 | 548 | 553 | 0 | 8.27 | 344 | 8.00 | 0.27 | |
| Chamera II HPS (3*100) | 300 | 301 | 312 | 0 | 2.38 | 99 | 2.15 | 0.23 | |
| Chamera III HPS (3*77) | 231 | 0 | 0 | 0 | 0.00 | 0 | 0.00 | 0.00 | |
| Bairasuli HPS(3*60) | 180 | 179 | 184 | 21 | 3.06 | 128 | 2.90 | 0.17 | |
| Salal-HPS (6*115) | 690 | 307 | 418 | 445 | 8.32 | 346 | 7.37 | 0.94 | |
| Tanakpur-HPS (3*31.4) | 94 | 20 | 29 | 24 | 0.54 | 23 | 0.47 | 0.07 | |
| Uri-I HPS (4*120) | 480 | 475 | 480 | 480 | 11.64 | 485 | 11.40 | 0.24 | |
| Uri-II HPS (4*60) | 240 | 237 | 241 | 241 | 5.74 | 239 | 5.69 | 0.04 | |
| Dhauliganga-HPS (4*70) | 280 | 280 | 280 | 0 | 0.94 | 39 | 0.84 | 0.10 | |
| Dulhasti-HPS (3*130) | 390 | 387 | 400 | 0 | 3.75 | 156 | 3.60 | 0.15 | |
| Sewa-II HPS (3*40) | 120 | 124 | 134 | 134 | 3.19 | 133 | 2.98 | 0.21 | |
| Parbati 3 (4*130) | 520 | 180 | 261 | 0 | 0.60 | 25 | 0.59 | 0.02 | |
| Sub Total (C) | 4065 | 3038 | 3291 | 1345 | 48 | 2018 | 46 | 2.44 | |
| D.SJVNL | | | | | | | | | |
| NJPC (6*250) | 1500 | 1605 | 1621 | 0 | 6.73 | 281 | 6.59 | 0.15 | |
| Rampur HEP (6*88.67) | 412 | 375 | 374 | 0 | 1.82 | 76 | 1.76 | 0.05 | |
| Sub Total (D) | 1912 | 1980 | 1995 | 0 | 8.55 | 356 | 8.35 | 0.20 | |
| E. THDC | | | | | | | | | |
| Tehri HPS (4*250) | 1000 | 704 | 695 | 0 | 6.76 | 281 | 6.80 | -0.04 | |
| Koteshwar HPS (4*100) | 400 | 125 | 300 | 95 | 3.03 | 126 | 3.00 | 0.03 | |
| Sub Total (E) | 1400 | 829 | 995 | 95 | 9.79 | 408 | 9.80 | -0.01 | |
| F. BBMB | | | | | | | | | |
| Bhakra HPS (2*108+3*126+5*157) | 1379 | 435 | 815 | 364 | 10.86 | 452 | 10.44 | 0.42 | |
| Dehar HPS (6*165) | 990 | 253 | 495 | 165 | 6.25 | 261 | 6.08 | 0.17 | |
| Pong HPS (6*66) | 396 | 11 | 55 | 0 | 0.27 | 11 | 0.28 | -0.01 | |
| Sub Total (F) | 2765 | 700 | 1365 | 529 | 17.38 | 724 | 16.79 | 0.59 | |
| G. IPP(s)/JV(s) | | | | | | | | | |
| ALLAIN DUHANGAN HPS(IPP) (2*96) | 192 | 0 | 0 | 0 | 0.50 | 21 | 0.48 | 0.02 | |
| KARCHAM WANGTOO HPS(IPP) (4*250) | 1000 | 0 | 620 | 0 | 3.72 | 155 | 3.55 | 0.16 | |
| Malana Stg-II HPS (2*50) | 100 | 0 | 0 | 0 | 0.30 | 12 | 0.28 | 0.02 | |
| Shree Cement TPS (2*150) | 300 | 0 | 146 | 148 | 3.51 | 146 | 4.37 | -0.86 | |
| Budhil HPS(IPP) (2*35) | 70 | 0 | 0 | 0 | 0.23 | 9 | 0.19 | 0.03 | |
| Sub Total (G) | 1662 | 0 | 766 | 148 | 8.25 | 344 | 8.87 | -0.62 | |
| H. Total Regional Entities (A-G) | 25237 | 18119 | 18007 | 10715 | 288.95 | 12040 | 288.32 | 0.63 | |

| 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 | 200 | 0 | 2.35 | 98 |
| | Guru Nanak Dev TPS(Bhatinda) (2*110+2*120) | 460 | 0 | 0 | 0.00 | 0 |
| | Guru Hargobind Singh TPS(L.mbt) (2*210+2*250) | 920 | 203 | 205 | 4.64 | 193 |
| | Goidwal(GVK) (2*270) | 540 | 0 | 0 | 0.00 | 0 |

| | | | | | | |
|-------------------------|--|-------------------------|-------------|---------------|---------------|-------------|
| | Rajpura (2*700) | 1400 | 1320 | 860 | 27.55 | 1148 |
| | Talwandi Saboo (3*660) | 1980 | 1024 | 924 | 27.77 | 1157 |
| | Thermal (Total) | 6560 | 2747 | 1989 | 62.32 | 2597 |
| | Total Hydro | 1000 | 191 | 87 | 2.80 | 117 |
| | Wind Power | 0 | 0 | 0 | 0.00 | 0 |
| | Biomass | 288 | 0 | 0 | 0.17 | 7 |
| | Solar | 560 | 0 | 0 | 0.08 | 4 |
| | Renewable(Total) | 848 | 0 | 0 | 0.26 | 11 |
| | Total Punjab | 8408 | 2938 | 2076 | 65.37 | 2724 |
| Haryana | Panipat TPS (2*210+2*250) | 920 | 202 | 199 | 5.01 | 209 |
| | DCRTPP (Yamuna nagar) (2*300) | 600 | 220 | 223 | 5.36 | 223 |
| | Faridabad GPS (NTPC)(2*137.75+1*156) | 432 | 160 | 164 | 3.91 | 163 |
| | RGTPP (khedar) (IPP) (2*600) | 1200 | 0 | 0 | 0.00 | 0 |
| | Magnum Diesel (IPP) | 25 | 0 | 0 | 0.00 | 0 |
| | Jhajjar(CLP) (2*660) | 1320 | 0 | 0 | 0.00 | 0 |
| | Thermal (Total) | 4497 | 582 | 586 | 14.28 | 595 |
| | Total Hydro | 62 | 16 | 24 | 0.44 | 18 |
| | Wind Power | 0 | 0 | 0 | 0.00 | 0 |
| | Biomass | 40 | 0 | 0 | 0.00 | 0 |
| | Solar | 0 | 0 | 0 | 0.00 | 0 |
| | Renewable(Total) | 40 | 0 | 0 | 0.00 | 0 |
| | Total Haryana | 4599 | 598 | 610 | 14.71 | 613 |
| Rajasthan | kota TPS (2*110+2*195+3*210) | 1240 | 307 | 319 | 7.47 | 311 |
| | suratgarh TPS (6*250) | 1500 | 178 | 188 | 4.67 | 195 |
| | Chabra TPS (4*250) | 1000 | 737 | 831 | 18.87 | 786 |
| | 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 | 155 | 159 | 4.66 | 194 |
| | RAPS A (NPC) (1*100+1*200) | 300 | 194 | 194 | 4.25 | 177 |
| | Barsingar (NLC) (2*125) | 250 | 214 | 214 | 4.92 | 205 |
| | Giral LTPS (2*125) | 250 | 0 | 0 | 0.00 | 0 |
| | Rajwest LTPS (IPP) (8*135) | 1080 | 409 | 488 | 14.36 | 598 |
| | VS LIGNITE LTPS (IPP) (1*135) | 135 | 0 | 0 | 0.00 | 0 |
| | Kalisindh Thermal(2*600) | 1200 | 834 | 817 | 21.39 | 891 |
| | Kawai(Adani) (2*660) | 1320 | 981 | 904 | 27.24 | 1135 |
| | Thermal (Total) | 8876 | 4009 | 4114 | 107.83 | 4493 |
| | Total Hydro | 550 | 60 | 92 | 2.29 | 95 |
| | Wind power | 4017 | 128 | 901 | 10.15 | 423 |
| | Biomass | 99 | 16 | 16 | 0.38 | 16 |
| | Solar | 1295 | 5 | 0 | 0.26 | 11 |
| | Renewable/Others (Total) | 5411 | 149 | 917 | 10.79 | 450 |
| | Total Rajasthan | 14837 | 4218 | 5123 | 120.91 | 5038 |
| UP | Anpara TPS (3*210+2*500) | 1630 | 1404 | 1400 | 33.36 | 1390 |
| | Obra TPS (2*50+2*94+5*200) | 1194 | 629 | 581 | 14.58 | 607 |
| | Paricha TPS (2*110+2*220+2*250) | 1160 | 593 | 783 | 17.59 | 733 |
| | Panki TPS (2*105) | 210 | 0 | 0 | 0.00 | 0 |
| | Harduaqanj TPS (1*60+1*105+2*250) | 665 | 157 | 204 | 4.71 | 196 |
| | Tanda TPS (NTPC) (4*110) | 440 | 393 | 394 | 8.62 | 359 |
| | Roza TPS (IPP) (4*300) | 1200 | 378 | 559 | 12.05 | 502 |
| | Anpara-C (IPP) (2*600) | 1200 | 1071 | 531 | 18.07 | 753 |
| | Bajaj Energy Pvt.Ltd(IPP) TPS (10*45) | 450 | 0 | 0 | 0.00 | 0 |
| | Anpara-D(2*500) | 1000 | 851 | 844 | 19.92 | 830 |
| | Lalitpur TPS(3*660) | 1980 | 469 | 484 | 11.09 | 462 |
| | Bara(2*660) | 1320 | 588 | 552 | 13.09 | 545 |
| | Thermal (Total) | 12449 | 6533 | 6332 | 153.06 | 6378 |
| | Vishnuparyag HPS (IPP)(4*110) | 440 | 73 | 75 | 1.74 | 72 |
| | Alakanada(4*82.5) | 330 | 84 | 84 | 1.23 | 51 |
| | Other Hydro | 527 | 0 | 129 | 1.36 | 57 |
| | Cogeneration | 981 | 850 | 850 | 20.40 | 850 |
| | Wind Power | 0 | 0 | 0 | 0.00 | 0 |
| | Biomass | 26 | 0 | 0 | 0.00 | 0 |
| | Solar | 102 | 0 | 0 | 0.00 | 0 |
| | Renewable(Total) | 128 | 0 | 0 | 0.00 | 0 |
| Total UP | 14855 | 7540 | 7470 | 177.79 | 7408 | |
| Uttarakhand | Other Hydro | 1250 | 316 | 235 | 6.99 | 291 |
| | Total Gas | 225 | 275 | 294 | 6.78 | 282 |
| | Wind Power | 0 | 0 | 0 | 0.00 | 0 |
| | Biomass | 127 | 0 | 0 | 0.00 | 0 |
| | Solar | 20 | 0 | 0 | 0.24 | 10 |
| | Small Hydro (< 25 MW) | 180 | 0 | 0 | 0.00 | 0 |
| | Renewable(Total) | 327 | 0 | 0 | 0.24 | 10 |
| | Total Uttarakhand | 1802 | 591 | 529 | 14.01 | 584 |
| Delhi | Rajghat TPS (2*67.5) | 135 | 0 | 0 | 0.00 | 0 |
| | Delhi Gas Turbine (6x30 + 3x34) | 282 | 73 | 75 | 1.84 | 77 |
| | Pragati Gas Turbine (2x104+ 1x122) | 330 | 155 | 159 | 3.67 | 153 |
| | Rithala GPS (3*36) | 95 | 0 | 0 | 0.00 | 0 |
| | Bawana GPS (4*216+2*253) | 1370 | 250 | 250 | 6.03 | 251 |
| | Badarpur TPS (NTPC) (3*95+2*210) | 705 | 0 | 0 | 0.00 | 0 |
| | Thermal (Total) | 2917 | 478 | 484 | 11.53 | 481 |
| | 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 | 478 | 484 | 11.53 | 481 |
| | HP | Baspa HPS (IPP) (3*100) | 300 | 0 | 0 | 0.13 |
| Malana HPS (IPP) (2*43) | | 86 | 0 | 0 | 0.36 | 15 |
| Other Hydro (>25MW) | | 372 | 140 | 91 | 2.73 | 114 |
| 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 | 187 | 131 | 3.88 | 162 |
| Renewable(Total) | | 486 | 187 | 131 | 3.88 | 162 |
| Total HP | | 1244 | 327 | 222 | 7.10 | 296 |
| J & K | Baqilhar HPS (IPP) (3*150+3*150) | 900 | 296 | 296 | 7.10 | 296 |
| | Other Hydro/IPP(including 98 MW Small Hydro) | 308 | 136 | 120 | 2.86 | 119 |
| | 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 | 432 | 416 | 10 | 415 | |

| | | | | | |
|--|-------|--------|--------|--------|-------|
| Total State Control Area Generation | 50078 | 17122 | 16930 | 421.39 | 17558 |
| J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)] | | 8071.3 | 8045.4 | 208.75 | 8698 |
| Total Regional Availability(Gross) | 75315 | 43200 | 35690 | 919.10 | 38296 |

IV. Total Hydro Generation:

| | | | | | |
|--------------------------|-------|-------|------|--------|------|
| Regional Entities Hydro | 12234 | 9137 | 1969 | 91.27 | 3803 |
| State Control Area Hydro | 7163 | 1774 | 1658 | 33.91 | 1705 |
| Total Regional Hydro | 19397 | 10912 | 3627 | 125.18 | 5508 |

V. Total Renewable Generation:

| | | | | | |
|------------------------------|------|-----|------|-------|-----|
| Regional Entities Renewable | 30 | 0 | 0 | 0.11 | 4 |
| State Control Area Renewable | 7356 | 336 | 1048 | 15.17 | 632 |
| Total Regional Renewable | 7386 | 336 | 1048 | 15.28 | 637 |

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) | -200 | -500 | 0 | 500 | 0.00 | 9.42 | -9.42 |
| 765 KV Gwalior-Agra (D/C) | 2172 | 2447 | 2857 | 0 | 61.45 | 0.00 | 61.45 |
| 400 KV Zerda-Kankroli | -125 | -276 | 0 | 276 | 0.00 | 4.76 | -4.76 |
| 400 KV Zerda-Bhimnal | -52 | -221 | 20 | 240 | 0.00 | 3.11 | -3.11 |
| 220 KV Auraiya-Malanpur | -15 | -5 | 0 | 32 | 0.00 | 0.24 | -0.24 |
| 220 KV Badod-Kota/Morak | 34 | 24 | 89 | 21 | 0.99 | 0.00 | 0.99 |
| Mundra-Mohinderghar(HVDC Bipole) | 1503 | 1348 | 1803 | 0.00 | 33.59 | 0.00 | 33.59 |
| 400 KV RAPP-Subalpur | 509 | 320 | 550 | 0 | 9.86 | 0.00 | 9.86 |
| 400 KV Vindhychal-Rihand | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 765 kV Phagi-Gwalior (D/C) | 1011 | 1226 | 1404 | 0 | 28.20 | 0.00 | 28.20 |
| +/- 800 kV HVDC Champa-Kurushetra | 1500 | 1500 | 1500 | 0 | 32.48 | 0.00 | 32.48 |
| Sub Total WR | 6337 | 5863 | | | 166.56 | 17.53 | 149.04 |
| 400 kV Sasaram - Varanasi | 284 | 281 | 285 | 0 | 6.34 | 0.00 | 6.34 |
| 400 kV Sasaram - Allahabad | 105 | 105 | 137 | 0 | 2.39 | 0.00 | 2.39 |
| 400 KV MZP- GKP (D/C) | 177 | 351 | 642 | 0 | 9.77 | 0.00 | 9.77 |
| 400 KV Patna-Balia(D/C) X 2 | 630 | 767 | 880 | 0 | 17.00 | 0.00 | 17.00 |
| 400 KV B'Sharif-Balia (D/C) | 38 | 93 | 309 | 0 | 3.86 | 0.00 | 3.86 |
| 765 KV Gaya-Balia | 160 | 186 | 317 | 0 | 5.51 | 0.00 | 5.51 |
| 765 KV Gaya-Varanasi (D/C) | 273 | 352 | 689 | 0 | 11.40 | 0.00 | 11.40 |
| 220 KV Pusauli-Sahupuri | 199 | 207 | 216 | 0 | 4.69 | 0.00 | 4.69 |
| 132 KV K'nasa-Sahupuri | 0 | 0 | 0 | 0 | 0.48 | 0.00 | 0.48 |
| 132 KV Son Ngr-Rihand | -22 | -25 | 0 | 40 | 0.00 | 0.62 | -0.62 |
| 132 KV Garhwa-Rihand | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 765 KV Sasaram - Fatehpur | -149 | -150 | 38 | 221 | 0.00 | 1.82 | -1.82 |
| 400 KV Barh -GKP (D/C) | 468 | 510 | 564 | 0 | 11.36 | 0.00 | 11.36 |
| 400 kV B'Sharif - Varanasi (D/C) | 76 | 5 | 183 | 76 | 1.33 | 0.00 | 1.33 |
| Sub Total ER | 2239 | 2682 | | | 74.13 | 2.44 | 71.69 |
| +/- 800 KV HVDC BiswanathChariali-Agra | -505 | -500 | 0 | 505.00 | 0.00 | 11.97 | -11.97 |
| Sub Total NER | -505 | -500 | | | 0.00 | 11.97 | -11.97 |
| Total IR Exch | 8071 | 8045 | | | 240.69 | 31.94 | 208.75 |

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 |
| 49.97 | 0.42 | 50.39 | -2.09 | -0.52 | 6.69 | 24.29 | 0.00 | 0.00 |

| Total IR Schedule (MU) | | | Total IR Actual (MU) | | | Net IR UI (MU) | | |
|------------------------|------------------------|--------|---------------------------|------------|--------|----------------------------|------------|--------|
| Through ER | Through WR Incls Mndra | Total | Through ER(including NER) | Through WR | Total | Through ER (including NER) | Through WR | Total |
| 54.98 | 171.01 | 225.99 | 59.72 | 149.04 | 208.75 | 4.73 | -21.97 | -17.24 |

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 | -33 | -37 | 0 | 37 | 0 | 1 | -0.80 |

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 | 0.16 | 6.69 | 52.75 | 77.25 | 14.02 | 2.80 | 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) | | |
| 50.19 | 17.32 | 49.75 | 22.18 | 49.99 | 0.036 | 0.060 | 50.09 | 49.84 | 22.75 |

VIII(A). Voltage profile 400 kV

| Station | Voltage Level (kV) | Maximum | | Minimum | | Voltage (in % of Time) | | | | Volta ge Deviat |
|-------------------|--------------------|-------------|-------|--------------|-------|------------------------|---------|---------|---------|-----------------------|
| | | Voltage(KV) | Time | Voltage (KV) | Time | <380 kV | <390 kV | >420 kV | >430 kV | |
| Rihand | 400 | 406 | 13:18 | 401 | 10:24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Gorakhpur | 400 | 414 | 2:02 | 397 | 18:29 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bareilly(PG)400kV | 400 | 418 | 2:40 | 400 | 18:44 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kanpur | 400 | 416 | 2:55 | 401 | 19:35 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dadri | 400 | 426 | 3:21 | 403 | 11:05 | 0.0 | 0.0 | 18.4 | 0.0 | 18.4 |
| Ballabgarh | 400 | 423 | 3:22 | 401 | 10:17 | 0.0 | 0.0 | 5.7 | 0.0 | 5.7 |
| Bawana | 400 | 424 | 2:55 | 404 | 10:19 | 0.0 | 0.0 | 15.7 | 0.0 | 15.7 |
| Bassi | 400 | 421 | 4:00 | 400 | 19:32 | 0.0 | 0.0 | 0.6 | 0.0 | 0.6 |
| Hissar | 400 | 420 | 2:59 | 400 | 10:12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Moga | 400 | 420 | 2:55 | 401 | 10:17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Abdullapur | 400 | 425 | 3:18 | 404 | 12:10 | 0.0 | 0.0 | 16.0 | 0.0 | 16.0 |
| Nalagarh | 400 | 428 | 0:15 | 405 | 11:06 | 0.0 | 0.0 | 23.8 | 0.0 | 23.8 |
| Kishenpur | 400 | 418 | 2:55 | 400 | 7:21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Wagoora | 400 | 399 | 13:00 | 376 | 7:25 | 10.6 | 76.9 | 0.0 | 0.0 | 10.6 |
| Amritsar | 400 | 426 | 3:19 | 402 | 10:25 | 0.0 | 0.0 | 22.6 | 0.0 | 22.6 |
| Kashipur | 400 | 0 | 0:00 | 0 | 0:00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Hamirpur | 400 | 404 | 0:00 | 404 | 0:00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Rishikesh | 400 | 421 | 3:21 | 399 | 10:16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

VIII(B). Voltage profile 765 kV

| Station | Voltage Level (kV) | Maximum | | Minimum | | Voltage (in % of Time) | | | | Volta ge Deviat |
|----------|--------------------|-------------|------|--------------|-------|------------------------|---------|---------|---------|-----------------------|
| | | Voltage(KV) | Time | Voltage (KV) | Time | <728 kV | <742 kV | >800 kV | >820 kV | |
| Fatehpur | 765 | 775 | 1:02 | 744 | 19:33 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Balia | 765 | 785 | 1:02 | 759 | 19:36 | 32.8 | 32.8 | 0.0 | 0.0 | 32.8 |

| | | | | | | | | | | |
|-----------------|-----|-----|------|-----|-------|-------|-------|-----|-----|-------|
| Moga | 765 | 800 | 0:31 | 764 | 9:34 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Agra | 765 | 788 | 3:18 | 757 | 19:36 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bhiwani | 765 | 803 | 3:00 | 772 | 9:29 | 0.0 | 0.0 | 5.1 | 0.0 | 5.1 |
| Unnao | 765 | 772 | 2:38 | 747 | 19:12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Lucknow | 765 | 788 | 2:38 | 760 | 18:45 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Meerut | 765 | 805 | 0:34 | 769 | 9:25 | 0.0 | 0.0 | 7.8 | 0.0 | 7.8 |
| Jhatikara | 765 | 806 | 3:21 | 769 | 10:24 | 0.0 | 0.0 | 7.7 | 0.0 | 7.7 |
| Bareilly 765 kV | 765 | 794 | 2:37 | 763 | 18:43 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Anta | 765 | 793 | 3:21 | 769 | 19:34 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Phagi | 765 | 0 | 0:00 | 0 | 0:00 | 100.0 | 100.0 | 0.0 | 0.0 | 100.0 |

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 | 465.40 | 199.81 | 481.50 | 495.33 | 189.24 | 373.30 |
| Pong | 426.72 | 384.05 | 396.50 | 151.67 | 396.81 | 157.28 | 44.49 | 20.05 |
| Tehri | 829.79 | 740.04 | 765.95 | 171.54 | 757.40 | 101.24 | 42.59 | 202.00 |
| Koteshwar | 612.50 | 598.50 | 610.87 | 4.95 | 611.24 | 5.20 | 202.00 | 199.74 |
| Chamera-I | 760.00 | 748.75 | 756.26 | 0.00 | 0.00 | 0.00 | 155.81 | 223.54 |
| 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 | 505.14 | 0.62 | 496.54 | 5.46 | 159.96 | 30.75 |

* NA: Not Available

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

| State | Off- Peak Hours (03:00 Hrs) | | | Peak Hours (19:00 Hrs) | | | Day Energy (MU) | | |
|-------------|-----------------------------|----------|-----------|------------------------|----------|-----------|-----------------|-----------------|------------|
| | Bilateral (MW) | IEX (MW) | PXIL (MW) | Bilateral (MW) | IEX (MW) | PXIL (MW) | Bilateral (MU) | IEX / PXIL (MU) | Total (MU) |
| Punjab | -101 | 0 | 0 | 0 | -303 | 0 | -2.41 | -1.01 | -3.42 |
| Delhi | -444 | -161 | 0 | -245 | 106 | 0 | -6.89 | -0.38 | -7.27 |
| Haryana | -363 | 220 | 0 | -137 | 308 | 0 | -4.11 | 7.60 | 3.49 |
| HP | 171 | -11 | 0 | 10 | -231 | 0 | 4.67 | -0.51 | 4.16 |
| J&K | 174 | 198 | 0 | 174 | 109 | 0 | 4.18 | 4.83 | 9.01 |
| CHD | 0 | -15 | 0 | 0 | 0 | 0 | 0.00 | -0.16 | -0.16 |
| Rajasthan | 28 | 406 | 0 | 24 | 357 | 0 | 0.61 | 8.83 | 9.44 |
| UP | 167 | 438 | 0 | 154 | 385 | 0 | 2.36 | 7.27 | 9.63 |
| Uttarakhand | 224 | 32 | 0 | 0 | 290 | 0 | 2.12 | 5.92 | 8.05 |
| Total | -143 | 1106 | 0 | -20 | 1021 | 0 | 0.54 | 32.40 | 32.94 |

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

| State | Bilateral (MW) | | IEX (MW) | | PXIL (MW) | |
|-------------|----------------|---------|----------|---------|-----------|---------|
| | Maximum | Minimum | Maximum | Minimum | Maximum | Minimum |
| Punjab | 0 | -404 | 0 | -404 | 0 | 0 |
| Delhi | -194 | -445 | 175 | -244 | 0 | 0 |
| Haryana | 61 | -382 | 377 | 134 | 0 | 0 |
| HP | 548 | 10 | 237 | -497 | 0 | 0 |
| J&K | 174 | 174 | 357 | 0 | 0 | 0 |
| CHD | 0 | 0 | 20 | -45 | 0 | 0 |
| Rajasthan | 34 | 17 | 544 | 16 | 0 | 0 |
| UP | 204 | 1 | 438 | -100 | 0 | 0 |
| Uttarakhand | 242 | 0 | 463 | 32 | 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 | 0.69% |
| Simultaneous | 0.00% |

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

| | |
|--------------|-------|
| WR | 0.00% |
| ER | 9.38% |
| 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 | 17 |
| Haryana | 0 | 9 |
| Rajasthan | 2 | 22 |
| Delhi | 5 | 48 |
| UP | 0 | 10 |
| Uttarakhand | 1 | 16 |
| HP | 1 | 20 |
| J & K | 4 | 45 |
| Chandigarh | 2 | 28 |

XIII. System Constraints:

XIV. Grid Disturbance / Any Other Significant Event:

XV. Weather Conditions For 25.03.2017 :

XVI. Synchronisation of new generating units :

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

Bay No:701 and 702 along with 765KV Bus-1 first time charged at 15:10 and 15:12Hrs respectively on 25.03.2017 at 765KV Mainpuri SS

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 : 25.03.2017

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER