पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड (पावरप्रिङ की पूर्ण स्वामित प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U040165L2096G0188682

Power Supply Position in Northern Region for 01.08.2016

Date of Reporting: 02.08.2016

I. Regional Availability/Demand:

| | Evening Peak (20:00 Hrs) MW | | | | | 00 Hrs) MW | Day Energy (Net MU) | | | |
|-------------------------------------|---|-------------|------------|------------|----------|-------------|---------------------|------------|----------|--|
| Demand Met | Shortage | Requirement | Freq* (Hz) | Demand Met | Shortage | Requirement | Freq* (Hz) | Demand Met | Shortage | |
| 44617 | 613 | 45230 | 50.05 | 42534 | 239 | 42774 | 50.03 | 1019.9 | 8.95 | |
| * Half hourly (two 15 minutes block | olf hourly (two 15 minutes block-one block each before and after the decinosted time) averane (requency | | | | | | | | | |

II. A. State's Load Details (At States periphery) in MUs: UI [OD:(+ve), UD: (-ve)] Drawal Consumption (Net MU) 231.09 165.36 163.37 State State's Control Area Generation (Net MU)
Hydro Renewable/others \$ Schedule (Net MU) Actual Drawal (Net MU) UI (Net MU) Shortages * (MU) Thermal Total Punjab Haryana Rajasthan Delhi UP 100.39 18.54 99.61 130.70 146.83 83.68 18.07 16.72 0.47 130.16 148.48 0.54 0.00 0.00 0.00 0.01 0.00 0.00 0.45 8.49 66.68 18.02 107.77 63.03 76.63 144.07 13.79 -0.86 15.69 0.73 -1.94 -0.58 31.90 63.76 74.70 143.48 1.03 18.02 127.47 92.71 270.95 19.70 UP Uttarakhand HP J & K Chandigarh 18.04 24.52 22.24 0.00 14.60 -0.15 11.70 5.50 0.82 0.71 -3.99 -0.79 32.64 24.36 33.94 5.50 18.04 24.52 22.24 0.00 6.29 0.00 Total 294.21 102.71 31.90 428.82 597.28 591.12 -6.16 1019.94 8.95

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

| State | | Evening Peak (20:00 Hrs) | MW | | | Off Peak (0 | 3:00 Hrs) MW | /OA/PX [OD/Import: (+ve) | | | |
|---|---|--------------------------------------|------|---------------------|------------|-------------|--------------|--------------------------|--|-------|------------------|
| | Demand Met | Shortage | UI | STOA/PX transaction | Demand Met | Shortage | UI | STOA/PX transaction | Maximum Demand M (MW) and Time(Hrs) | | Shortage (MW) |
| Punjab | 9695 | 0 | -203 | 1549 | 9131 | 0 | 44 | 1543 | 10102 | 16:00 | 0 |
| Haryana | 7624 | 0 | -9 | 1922 | 6771 | 0 | -126 | 2218 | 8365 | 21:00 | 0 |
| Rajasthan | 6728 | 0 | -227 | 381 | 6655 | 0 | -46 | 406 | 7050 | 23:00 | 0 |
| Delhi | 3939 | 0 | -205 | 323 | 3626 | 0 | -121 | 195 | 4526 | 16:00 | 0 |
| UP | 11805 | 200 | 123 | 679 | 13007 | 0 | -152 | 978 | 13236 | 1:00 | 0 |
| Uttarakhand | 1643 | 0 | 210 | -3 | 1179 | 0 | -121 | -45 | 1643 | 20:00 | 0 |
| HP | 1081 | 0 | 136 | -1624 | 867 | 0 | 15 | -1742 | 1182 | 10:00 | 2 |
| J&K | 1863 | 413 | -51 | -647 | 1098 | 239 | -203 | -1032 | 1711 | 21:00 | 428 |
| Chandigarh | 239 | 0 | -33 | 0 | 201 | 0 | -26 | 0 | 276 | 15:00 | 0 |
| Total | 44617 | 613 | -260 | 2579 | 42534 | 239 | -737 | 2521 | 45828 | 21:00 | 428 |
| * STOA figures are at sellers bound III. Regional Entities : | dary & PX figures are at regional boundary. # figures | res may not be at simultaneous hour. | | | | | , | Diversity is UI [OC | 1.05 G:(+ve), UG: (-ve) |] | * |

| III. Regional Entitie | | 1 | | 1 | | | | UI [OG | :(+ve), UG: (-ve)] |
|-----------------------|----------------------------------|----------------|--------------|---------------|-------------|----------|-------------|-----------------|--------------------|
| | Station/ | Inst. Capacity | Declared | Peak MW | Off Peak MW | Energy | Average | Schedule | UI |
| | Constituent | (Effective) MW | Capacity(MW) | (Gross) | (Gross) | (Net MU) | Sentout(MW) | Net MU | Net MU |
| A. NTPC | Singrauli STPS (5*200+2*500) | 2000 | 1704 | 1470 | 1338 | 35.69 | 1487 | 35.68 | 0.00 |
| | Rihand I STPS (2*500) | 1000 | 940 | 828 | 632 | 16.07 | 669 | 16.59 | -0.52 |
| | Rihand II STPS (2*500) | 1000 | 952 | 796 | 660 | 15.68 | 653 | 16.35 | -0.67 |
| | Rihand III STPS (2*500) | 1000 | 945 | 677 | 578 | 15.00 | 625 | 16.66 | -1.67 |
| | Dadri I STPS (4*210) | 840 | 805 | 163 | 162 | 3.73 | 155 | 3.64 | 0.08 |
| | Dadri II STPS (2*490) | 980 | 960 | 662 | 661 | 15.62 | 651 | 16.07 | -0.46 |
| | Unchahar I TPS (2*210) | 420 | 350 | 256 | 259 | 5.59 | 233 | 5.92 | -0.33 |
| | Unchahar II TPS (2*210) | 420 | 400 | 256 | 239 | 5.63 | 235 | 6.74 | -1.11 |
| | Unchahar III TPS (1*210) | 210 | 200 | 141 | 129 | 2.93 | 122 | 3.36 | -0.43 |
| | ISTPP (Jhajjhar) (3*500) | 1500 | 970 | 726 | 457 | 11.74 | 489 | 12.00 | -0.26 |
| | Dadri GPS (4*130.19+2*154.51) | 830 | 793 | 156 | 149 | 3.56 | 148 | 3.53 | 0.03 |
| | Anta GPS (3*88.71+1*153.2) | 419 | 400 | 244 | 245 | 5.27 | 219 | 5.59 | -0.32 |
| | Auraiya GPS (4*111.19+2*109.30) | 663 | 633 | 0 | 0 | 0.00 | 0 | 0.00 | 0.00 |
| | Dadri Solar(5) | 5 | 1 | 0 | 0 | 0.01 | 0 | 0.02 | -0.01 |
| | Unchahar Solar(10) | 10 | 0 | 0 | 0 | 0.01 | 1 | 0.01 | 0.00 |
| | Singrauli Solar(15) | 15 | 1 | 0 | 0 | 0.03 | 1 | 0.03 | 0.00 |
| | KHEP(4*200) | 800 | 855 | 852 | 852 | 20.49 | 854 | 20.52 | -0.03 |
| | Sub Total (A) | 12112 | 10908 | 7227 | 6361 | 157 | 6543 | 163 | -5.67 |
| 3. NPC | NAPS (2*220) | 440 | 387 | 421 | 428 | 9.26 | 386 | 9.29 | -0.03 |
| | RAPS- B (2*220) | 440 | 176 | 204 | 203 | 4.26 | 178 | 4.22 | 0.04 |
| | RAPS- C (2*220) | 440 | 410 | 443 | 447 | 9.50 | 396 | 9.84 | -0.34 |
| | Sub Total (B) | 1320 | 973 | 1068 | 1078 | 23.02 | 959 | 23.35 | -0.33 |
| . NHPC | Chamera I HPS (3*180) | 540 | 540 | 533 | 430 | 12.44 | 518 | 12.53 | -0.09 |
| | Chamera II HPS (3*100) | 300 | 301 | 309 | 300 | 7.23 | 301 | 7.22 | 0.00 |
| | Chamera III HPS (3*77) | 231 | 229 | 228 | 232 | 5.46 | 228 | 5.50 | -0.04 |
| | Bairasuil HPS(3*60) | 180 | 180 | 183 | 101 | 2.92 | 122 | 2.99 | -0.07 |
| | Salal-HPS (6*115) | 690 | 611 | 565 | 674 | 15.19 | 633 | 14.67 | 0.52 |
| | Tanakpur-HPS (3*31.4) | 94 | 63 | 64 | 64 | 1.54 | 64 | 1.51 | 0.03 |
| | Uri-I HPS (4*120) | 480 | 408 | 432 | 323 | 9.77 | 407 | 9.80 | -0.03 |
| | Uri-II HPS (4*60) | 240 | 234 | 236 | 239 | 5.66 | 236 | 5.62 | 0.04 |
| | Dhauliganga-HPS (4*70) | 280 | 210 | 210 | 205 | 5.03 | 210 | 5.04 | -0.01 |
| | Dulhasti-HPS (3*130) | 390 | 381 | 389 | 384 | 9.19 | 383 | 9.14 | 0.05 |
| | Sewa-II HPS (3*40) | 120 | 119 | 124 | 41 | 2.43 | 101 | 2.50 | -0.07 |
| | Parbati 3 (4*130) | 520 | 520 | 516 | 123 | 4.23 | 176 | 4.23 | 0.00 |
| | Sub Total (C) | 4065 | 3797 | 3789 | 3116 | 81 | 3378 | 81 | 0.34 |
|).SJVNL | NJPC (6*250) | 1500 | 1605 | 1590 | 1563 | 38.08 | 1587 | 38.38 | -0.29 |
| 7.00 VIVE | Rampur HEP (6*68.67) | 412 | 442 | 439 | 444 | 10.57 | 440 | 10.61 | -0.23 |
| | Sub Total (D) | 1912 | 2047 | 2029 | 2007 | 48.65 | 2027 | 48.98 | -0.33 |
| . THDC | Tehri HPS (4*250) | 1000 | 892 | 871 | 709 | 19.98 | 833 | 20.68 | -0.70 |
| . THEC | Koteshwar HPS (4*100) | 400 | 342 | 395 | 283 | 7.88 | 328 | 8.20 | -0.32 |
| | Sub Total (E) | 1400 | 1234 | 1266 | 992 | 27.86 | 1161 | 28.88 | -1.02 |
| . BBMB | Bhakra HPS (2*108+3*126+5*157) | 1379 | 813 | 1321 | 635 | 19.39 | 808 | 19.50 | -0.11 |
| . DDIVID | Dehar HPS (6*165) | 990 | 603 | 825 | 560 | 14.89 | 620 | 14.47 | 0.42 |
| | | 396 | 231 | 310 | 186 | 5.50 | 229 | 5.53 | -0.04 |
| | Pong HPS (6*66) Sub Total (F) | 2765 | 1646 | 2456 | 1381 | 39.77 | 1657 | 39.51 | 0.27 |
| i. IPP(s)/JV(s) | ALLAIN DUHANGAN HPS(IPP) (2*96) | 192 | 0 | 231 | 198 | 5.11 | 213 | 4.89 | 0.22 |
| . IFF(S)/JV(S) | | 1000 | 0 | 1100 | 1100 | 25.80 | 1075 | 26.08 | -0.28 |
| | KARCHAM WANGTOO HPS(IPP) (4*250) | 1000 | 0 | | 1100 | | | | |
| | Malana Stg-II HPS (2*50) | | | 112 | | 2.64 | 110 | 2.50 | 0.14 |
| | Shree Cement TPS (2*150) | 300 | 0 | 253 | 220 | 5.60 | 233 | 5.75 | -0.15 |
| | Budhil HPS(IPP) (2*35) | 70 | 0 | 73 | 70 | 0.17 | 7 | 1.66 | -1.49 |
| L Tatal Door | Sub Total (G) | 1662 | 0 20605 | 1768 19603 | 1699 | 39.31 | 1638 | 40.88 425.05 | -1.57 |
| l. Total Regiona | i Enules (A-G) | 25237 | 20005 | 19003 | 16635 | 416.73 | 17364 | 425.05 | -8.32 |

| I. State Entities | Station | Effective Installed Capacity (MW) | Peak MW | Off Peak MW | Energy(MU) | Average(Se ut MW) |
|--|--|---|---------|-------------|------------|---|
| Punjab | Guru Gobind Singh TPS (Ropar) (6*210) | 1260 | 660 | 660 | 14.76 | 615 |
| | Guru Nanak Dev TPS(Bhatinda) (2*110+2*120) | 460 | 90 | 90 | 2.03 | 84 |
| | | | | | | |
| | | (MW) 1260 660 660 14.76 | | | | |
| | | | | | | |
| | · · | | | | | _ |
| | | | | | | |
| | | | | | | |
| | Station Capacity Peak MW Off Peak MW Energy(NU) New Peak MW Capacity C | | | | | |
| Haryana | · · · · · · · · · · · · · · · · · · · | | | | | |
| | | | | | | |
| | | | | | | |
| | | | _ | _ | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | - | |
|) - i 4l | | | | | | |
| Rajasthan | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | - | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | ut MW, 615 84 440 226 1268 855 3487 696 4183 0 0 437 316 0 0 0 753 20 772 148 185 657 0 163 161 52 0 0 888 2778 43 1314 15 0 0 1329 4150 996 6363 608 129 425 525 650 779 117 0 0 0 150 0 0 150 0 150 0 |
| ID | | | | | | |
| IP | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | • • | | | | | |
| | | | | | | |
| | _ | | | | | |
| Ittarakhand | | | | | | |
| unitalia | | | | | | |
| | | | | - | | |
| Pelhi | | | | | | |
| | | | | - | | |
| | , | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| IP. | Baspa HPS (IPP) (3*100) | | | | | |
| | Malana HPS (IPP) (2*43) | | | | | 1 |
| | Other Hydro | | | | | |
| | Total HP | | | | | |
| I&K | Baglihar HPS (IPP) (3*150+2*150) | | | | | |
| | Other Hydro/IPP | | | | | |
| | Gas/Diesel/Others | | | | | |
| | Total J & K | | | | | |
| otal State Contr | ol Area Generation | | | | | |
| | nal Exchange [Import (+ve)/Export (-ve)] | 41019 | | | | |
| | vailability(Gross) | 72856 | | | | 43511 |
| otal Regional Av | | | | | | |
| . Total Hydro G | | | | | | |
| otal Regional Av 7. Total Hydro G egional Entities tate Control Are | Hydro | | | | | |

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

| Element | Peak(20:00 Hrs) | Off Peak(03:00 Hrs) | Maximum Inter | change (MW) | Energ | y (MU) | Net Energy |
|------------------------------------|-----------------|---------------------|---------------|-------------|--------|--------|------------|
| Licitott | MW | MW | Import | Export | Import | Export | MU |
| Vindhychal(HVDC B/B) | -200 | -500 | 0 | 500 | 0.00 | 9.00 | -9.00 |
| 765 KV Gwalior-Agra (D/C) | 2988 | 2349 | 2988 | 0 | 56.08 | 0.00 | 56.08 |
| 400 KV Zerda-Kankroli | 138 | -40 | 264 | 95 | 2.09 | 0.00 | 2.09 |
| 400 KV Zerda-Bhinmal | 132 | -76 | 326 | 118 | 2.36 | 0.00 | 2.36 |
| 220 KV Auraiya-Malanpur | 57 | 17 | 0 | 30 | 0.75 | 0.00 | 0.75 |
| 220 KV Badod-Kota/Morak | 133 | 127 | 209 | 0 | 3.26 | 0.00 | 3.26 |
| Mundra-Mohindergarh(HVDC Bipole) | 1198 | 1803 | 2004 | 0.00 | 39.78 | 0.00 | 39.78 |
| 400 KV Vindhyachal - Rihand | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 765 kV Phagi-Gwalior (D/C) | 1130 | 826 | 1307 | 0 | 24.26 | 0.00 | 24.26 |
| Sub Total WR | 5576 | 4506 | | | 128.58 | 9.00 | 119.58 |
| Pusauli Bypass/HVDC | -108 | -80 | 0 | 108 | 0.00 | 1.79 | -1.79 |
| 400 KV MZP- GKP (D/C) | 362 | 420 | 576 | 0 | 10.74 | 0.00 | 10.74 |
| 400 KV Patna-Balia(D/C) X 2 | 537 | 504 | 602 | 0 | 13.02 | 0.00 | 13.02 |
| 400 KV B'Sharif-Balia (D/C) | 230 | 250 | 344 | 0 | 5.63 | 0.00 | 5.63 |
| 765 KV Gaya-Balia | 388 | 362 | 424 | 0 | 4.23 | 0.00 | 4.23 |
| 765 KV Gaya-Varanasi (D/C) | -649 | -561 | 792 | 0 | 14.92 | 0.00 | 14.92 |
| 220 KV Pusauli-Sahupuri | 153 | 229 | 232 | 0 | 4.38 | 0.00 | 4.38 |
| 132 KV K'nasa-Sahupuri | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 132 KV Son Ngr-Rihand | -30 | -32 | 0 | 42 | 0.00 | 0.27 | -0.27 |
| 132 KV Garhwa-Rihand | 0 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 |
| 765 KV Sasaram - Fatehpur | 97 | -38 | 97 | 161 | 1.56 | 0.00 | 1.56 |
| 400 KV Barh -GKP (D/C) | 500 | 500 | 520 | 0 | 10.33 | 0.00 | 10.33 |
| 400 kV B'Sharif - Varanasi (D/C) | -151 | -122 | 243 | 0 | 4.55 | 0.00 | 4.55 |
| Sub Total ER | 1329 | 1432 | | | 69.34 | 2.06 | 67.27 |
| +/- 800 KV BiswanathCharialli-Agra | 500 | 500 | 500 | 0.00 | 11.87 | 0.00 | 11.87 |
| Sub Total NER | 500 | 500 | | | 11.87 | 0.00 | 11.87 |
| Total IR Exch | 7405 | 6438 | | | 209.79 | 11.07 | 198.72 |

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

| ISGS/LT Schedule (MU) | | | Bilateral Sched | dule (MU) | Power Excha | nge Shdl (MU) | J) Wheeling (MU) | | |
|-----------------------|--------|-------|-----------------|------------|-------------|---------------|------------------|------------|--|
| ER | Bhutan | Total | Through ER | Through WR | Through ER | Through WR | Through ER | Through WR | |
| 38.25 | 3.24 | 41.49 | 37.16 | 14.45 | -3.82 | -3.78 | 0.00 | 0.00 | |

| Total IR Schedule (MU) | | | Total | IR Actual (MU) | | Net IR UI (MU) | | | |
|------------------------|-------------------------|--------|----------------------|----------------|--------|----------------|---------|-------|--|
| | | | | | | Through ER | | | |
| | | | Through ER(including | | | (including | Through | | |
| Through ER | Through WR Inclds Mndra | Total | NER) | Through WR | Total | NER) | WR | Total | |
| 74.83 | 115.89 | 190.72 | 79.14 | 119.58 | 198.72 | 4.31 | 3.70 | 8.01 | |

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 | |
|---------------------------------|-----------------|---------------------|--------------------------------------|--------|--------|------------|-------|
| Liement | MW | MW | Import | Export | Import | Export | MU |
| 132 KV Tanakpur - Mahendarnagar | -28 | -25 | 0 | 32 | 0 | 1 | -0.63 |

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 |
|-----|---|-------|-------|-------|-------|------------|-------------|-------------|--------|--------|
| 0.0 |) | 0.00 | 0.00 | 0.35 | 19.47 | 50.24 | 34.00 | 15.22 | 0.31 | 0.00 |

| | <> | | | | Frequency | | Frequency in | 15 Min Block | Freq Dev |
|-------|---------|-------|---------|-----------|-----------|-----------|--------------|--------------|----------|
| | Maximum | N | linimum | Frequency | Variation | Std. Dev. | MAX | Index (% | |
| Freq | Time | Freq | Time | Hz | Index | | (Hz) | (Hz) | of Time) |
| 50.21 | 13.03 | 49.85 | 19.13 | 50.05 | 0.052 | 0.054 | 50.29 | 0.00 | 49.76 |

VII. Voltage profile 400 kV

| Station | Voltage Level (kV) | М | aximum | Minim | um | | Voltage (in | % of Time) | | Volta |
|-------------------|--------------------|-------------|--------|--------------|-------|---------|-------------|------------|---------|--------------|
| Station | voitage Level (kv) | Voltage(KV) | Time | Voltage (KV) | Time | <380 kV | <390 kV | >420 kV | >430 kV | ge Deviat |
| Rihand | 400 | 404 | 0:00 | 401 | 3:20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Gorakhpur | 400 | 421 | 6:04 | 396 | 12:39 | 0.0 | 0.0 | 1.0 | 0.0 | 1.0 |
| Bareilly(PG)400kV | 400 | 399 | 0:00 | 399 | 0:00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kanpur | 400 | 416 | 6:40 | 390 | 14:43 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dadri | 400 | 416 | 6:01 | 389 | 14:47 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 |
| Ballabhgarh | 400 | 424 | 6:02 | 388 | 14:49 | 0.0 | 0.4 | 6.1 | 0.0 | 6.1 |
| Bawana | 400 | 417 | 6:01 | 390 | 14:26 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bassi | 400 | 423 | 6:40 | 396 | 14:43 | 0.0 | 0.0 | 4.6 | 0.0 | 4.6 |
| Hissar | 400 | 416 | 6:02 | 388 | 14:20 | 0.0 | 2.8 | 0.0 | 0.0 | 0.0 |
| Moga | 400 | 413 | 6:08 | 388 | 14:19 | 0.0 | 3.3 | 0.0 | 0.0 | 0.0 |
| Abdullapur | 400 | 411 | 23:26 | 387 | 14:49 | 0.0 | 6.7 | 0.0 | 0.0 | 0.0 |
| Nalagarh | 400 | 419 | 6:00 | 391 | 14:25 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kishenpur | 400 | 410 | 6:35 | 389 | 14:19 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 |
| Wagoora | 400 | 410 | 5:36 | 384 | 14:10 | 0.0 | 15.5 | 0.0 | 0.0 | 0.0 |
| Amritsar | 400 | 416 | 4:03 | 393 | 12:23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kashipur | 400 | 419 | 6:03 | 406 | 12:40 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Hamirpur | 400 | 414 | 4:03 | 399 | 0:00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Rishikesh | 400 | 429 | 23:55 | 398 | 12:11 | 0.0 | 0.0 | 26.7 | 0.0 | 26.7 |

VIII. Voltage profile 765 kV

| Station | Voltage Level (kV) | Maximum | | Minimum | | Voltage (in % of Time) | | | | Volta |
|-----------------|--------------------|-------------|-------|--------------|-------|------------------------|---------|---------|---------|--------------|
| | | Voltage(KV) | Time | Voltage (KV) | Time | <728 kV | <742 kV | >800 kV | >820 kV | ge Deviat |
| Fatehpur | 765 | 784 | 6:08 | 733 | 14:43 | 0.0 | 4.0 | 0.0 | 0.0 | 0.0 |
| Balia | 765 | 781 | 6:04 | 737 | 14:43 | 0.0 | 3.9 | 0.0 | 0.0 | 0.0 |
| Moga | 765 | 774 | 16:59 | 752 | 15:17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Agra | 765 | 794 | 6:07 | 743 | 14:48 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bhiwani | 765 | 800 | 6:08 | 746 | 14:24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Unnao | 765 | 778 | 8:00 | 731 | 14:49 | 0.0 | 6.7 | 0.0 | 0.0 | 0.0 |
| Lucknow | 765 | 798 | 6:17 | 748 | 14:43 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Meerut | 765 | 806 | 6:07 | 748 | 14:20 | 0.0 | 0.0 | 3.0 | 0.0 | 3.0 |
| Jhatikara | 765 | 796 | 4:27 | 742 | 14:49 | 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 | 788 | 5:56 | 759 | 14:47 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Phagi | 765 | 796 | 6:08 | 754 | 14:21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

IX. Reservior Parameters:

| Name of | Parameters | | Present Para | Last Year | | Last day | | |
|---------------|------------|----------|--------------|-------------|-----------|-------------|----------------------------|--------------|
| Reservior | FRL (m) | MDDL (m) | Level (m) | Energy (MU) | Level (m) | Energy (MU) | Inflow (m ³ /s) | Usage (m³/s) |
| Bhakra | 513.59 | 445.62 | 486.58 | 627.57 | 503.14 | 1232.31 | 1187.58 | 646.84 |
| Pong | 426.72 | 384.05 | 403.40 | 296.79 | 416.31 | 730.66 | 1421.93 | 384.46 |
| Tehri | 829.79 | 740.04 | 793.15 | 500.50 | 793.70 | 508.00 | 1106.94 | 509.00 |
| Koteshwar | 612.50 | 598.50 | 609.47 | 4.44 | 611.03 | 5.20 | 509.00 | 519.99 |
| Chamera-I | 760.00 | 748.75 | 754.17 | 0.00 | 0.00 | 0.00 | 312.88 | 341.03 |
| 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 | 507.75 | 6.02 | 523.44 | 10.78 | 364.69 | 258.98 |

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

| State | Off- Peak Hours (03:00 Hrs) | | | Peak Hours (20:00 Hrs) | | | Day Energy (MU) | | |
|-------------|-----------------------------|----------|-----------|------------------------|----------|-----------|-----------------|-----------------|------------|
| State | Bilateral (MW) | IEX (MW) | PXIL (MW) | Bilateral (MW) | IEX (MW) | PXIL (MW) | Bilateral (MU) | IEX / PXIL (MU) | Total (MU) |
| Punjab | 1430 | 113 | 0 | 1145 | 403 | 0 | 37.82 | 3.53 | 41.35 |
| Delhi | 626 | -431 | 0 | 583 | -260 | 0 | 16.37 | -7.38 | 8.99 |
| Haryana | 1963 | 255 | 0 | 1606 | 317 | 0 | 42.03 | 6.62 | 48.65 |
| HP | -1500 | -243 | 0 | -1222 | -403 | 0 | -31.54 | -7.02 | -38.55 |
| J&K | -582 | -450 | 0 | -632 | -15 | 0 | -14.78 | -3.25 | -18.03 |
| CHD | 0 | 0 | 0 | 0 | 0 | 0 | 0.35 | 0.00 | 0.35 |
| Rajasthan | -137 | 543 | 0 | -137 | 518 | 0 | -3.29 | 12.94 | 9.65 |
| UP | 978 | 0 | 0 | 679 | 0 | 0 | 17.30 | 0.00 | 17.30 |
| Uttarakhand | -90 | 46 | 0 | -89 | 85 | 0 | -2.15 | 0.38 | -1.77 |
| Total | 2689 | -168 | 0 | 1934 | 645 | 0 | 62.12 | 5.83 | 67.95 |

X(R) Short-Term Open Access Details:

| State | Bilateral (MW) | | IEX (M | PXIL (MW) | | |
|-------------|----------------|---------|---------|-----------|---------|---------|
| Otate | Maximum | Minimum | Maximum | Minimum | Maximum | Minimum |
| Punjab | 1815 | 1118 | 778 | 0 | 0 | 0 |
| Delhi | 844 | 567 | -29 | -604 | 0 | 0 |
| Haryana | 1991 | 1560 | 351 | 28 | 0 | 0 |
| HP | -1218 | -1501 | -187 | -504 | 0 | 0 |
| J&K | -582 | -733 | 0 | -500 | 0 | 0 |
| CHD | 44 | 0 | 0 | 0 | 0 | 0 |
| Rajasthan | -137 | -137 | 548 | 518 | 0 | 0 |
| UP | 994 | 591 | 0 | 0 | 0 | 0 |
| Uttarakhand | -88 | -92 | 91 | -201 | 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 | 0.69% |
|--------------|-------|
| ER | 0.00% |
| Simultaneous | 4.51% |

(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 01.08.2016 :

XV. Synchronisation of new generating units :

XVI. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation: 400kV Bus 1 at Rajpura (Punjab) first time charged at 1428 Hrs on 01-08-2016.

XVII. Tripping of lines in pooling stations :

 $\ensuremath{\mathsf{XVIII}}.$ 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.