

# POWER SYSTEM OPERATION CORPORATION LIMITED NORTHERN REGIONAL LOAD DESPATCH CENTRE DAILY OPERATION REPORT OF NORTHERN REGION

Power Supply Position in Northern Region For 02-Jan-2019

Date of Reporting:03-Jan-2019

## 1. Regional Availability/Demand:

|            | Evening Peak (19:00)   | MW          |           | Off-Peak (03:00) MW |                     |             |           | Day Ener   | gy(Net MU) |
|------------|------------------------|-------------|-----------|---------------------|---------------------|-------------|-----------|------------|------------|
| Demand Met | Shortage(-)/Surplus(+) | Requirement | Freq (Hz) | Demand<br>Met       | Shortage(-)/Surplus | Requirement | Freq (Hz) | Demand Met | Shortage   |
| 45,781     | 704                    | 46,485      | 49.92     | 30,218              | 277                 | 30,495      | 50.02     | 945        | 16.72      |

2(A)State's Load Deails (At State Periphery) in MU:

|                     |         |       | State's Contro        | ol Area Gen | eration (Ne | et MU)                                  |        | Drawal Sch | Act Drawal | UI       | Requirement | Shortage | Consumption |
|---------------------|---------|-------|-----------------------|-------------|-------------|---|--------|------------|------------|----------|-------------|----------|-------------|
| State               | Thermal | Hydro | Gas/Naptha/<br>Diesel | Solar       | Wind        | OthersBiomass/Small<br>Hyd/Co-gen etc.) | Total  | (Net MU)   | (Net MU)   | (Net MU) | (Net MU)    | (Net MU) | (Net MU)    |
| PUNJAB              | 62.61   | 11.29 | 0                     | 3.8         | 0           | 1.02                                    | 78.72  | 30.02      | 29.24      | -0.78    | 107.96      | 0        | 107.96      |
| HARYANA             | 63.38   | 0.43  | 3.91                  | 0.1         | 0           | 0.89                                    | 68.71  | 56.04      | 56.76      | 0.72     | 127.68      | 2.21     | 125.47      |
| RAJASTHAN           | 151.77  | 3.26  | 1.46                  | 12.58       | 7           | 3.19                                    | 179.27 | 61.19      | 60.5       | -0.69    | 239.77      | 0        | 239.77      |
| DELHI               | -0.02   | 0     | 17.32                 | 0           | 0           | 1.13                                    | 18.44  | 51.52      | 50.58      | -0.94    | 69.02       | 0        | 69.02       |
| UTTAR PRADESH       | 136.75  | 7.42  | 0                     | 2.51        | 0           | 21.6                                    | 168.27 | 117.19     | 116.91     | -0.28    | 288.88      | 3.7      | 285.18      |
| UTTARAKHAND         | 0       | 8.71  | 4.92                  | 0.46        | 0           | 0.83                                    | 14.93  | 23.27      | 23.28      | 0.01     | 38.37       | 0.16     | 38.21       |
| HIMACHAL<br>PRADESH | 0       | 3.58  | 0                     | 0           | 0           | 2.01                                    | 5.59   | 24.73      | 25.05      | 0.32     | 30.64       | 0        | 30.64       |
| JAMMU &<br>KASHMIR  | 0       | 4.75  | 0                     | 0           | 0           | 0                                       | 4.75   | 45.65      | 40.06      | -5.59    | 55.46       | 10.65    | 44.81       |
| CHANDIGARH          | 0       | 0     | 0                     | 0           | 0           | 0                                       | 0      | 3.41       | 3.77       | 0.36     | 3.77        | 0        | 3.77        |
| Region              | 414.49  | 39.44 | 27.61                 | 19.45       | 7           | 30.67                                   | 538.68 | 413.02     | 406.15     | -6.87    | 961.55      | 16.72    | 944.83      |

2(B)State Demand Met (Peak and off-peak Hrs)

|                     |            | Evening P              | eak (19:00) MW |                        |            | Off-Peak (03:00) | MW   |                        |
|---------------------|------------|------------------------|----------------|------------------------|------------|------------------|------|------------------------|
| State               | Demand Met | Shortage(-)/Surplus(+) | UI             | STOA/PX<br>Transaction | Demand Met | Shortage(-)/Sur  | UI   | STOA/PX<br>Transaction |
| PUNJAB              | 5,597      | 0                      | -8             | -1,453                 | 3,128      | 0                | -28  | -1,404                 |
| HARYANA             | 6,642      | 0                      | 114            | -812                   | 3,964      | 0                | 20   | -807                   |
| RAJASTHAN           | 10,374     | 0                      | 86             | -983                   | 7,891      | 0                | -49  | 56                     |
| DELHI               | 3,507      | 0                      | 30             | -799                   | 1,558      | 0                | 5    | -1,301                 |
| UTTAR PRADESH       | 13,929     | 100                    | -114           | 95                     | 9,986      | 0                | -163 | 26                     |
| UTTARAKHAND         | 1,911      | 80                     | 78             | 487                    | 1,232      | 0                | 5    | 464                    |
| HIMACHAL<br>PRADESH | 1,528      | 0                      | 118            | 721                    | 805        | 0                | -105 | 566                    |
| JAMMU &<br>KASHMIR  | 2,097      | 524                    | -232           | 1,155                  | 1,571      | 277              | -267 | 710                    |
| CHANDIGARH          | 196        | 0                      | 12             | 0                      | 84         | 0                | -6   | -15                    |
| Region              | 45,781     | 704                    | 84             | -1,589                 | 30,219     | 277              | -588 | -1,705                 |

 $2 (C) State's\ Demand\ Met\ in\ MWs\ (Maximum\ Demand\ Met\ and\ Maximum\ requirement\ of\ the\ day\ details)$ 

| 2(C)State's Dema |                                     | `     | emand Met and Maxin                                    |  | tne day details)                     |   |   |   |                      |      |  |
|------------------|-------------------------------------|-------|--|--|--------------------------------------|---|---|---|----------------------|------|--|
|                  | Maximum Der                         |       | onding shortage and re<br>for the day                  | quirement details                            | Maximun                              | aximum requirement, corresponding shortage and demand details for the day |   |   |                      |      |  |
| State            | Maximum<br>Demand Met of<br>the day | Time  | Shortage(-) /Surplus(+)<br>during at maximum<br>demand | Requirement at the max demand met of the day | Maximum<br>Requirement of the<br>day | Time  | Shortage(-) /Surplus(+)<br>during at maximum<br>Requirement | Demand Met at<br>maximum<br>requiremnet | Min<br>Demand<br>Met | Time |  |
| PUNJAB           | 5,597                               | 19:00 | 0  | 5,597  | 5,597                                | 19:00   | 0   | 5,597                                   | 3,128                | 3:00 |  |
| HARYANA          | 6,642                               | 19:00 | 0  | 6,642  | 6,642                                | 19:00   | 0   | 6,642                                   | 3,964                | 3:00 |  |
| RAJASTHAN        | 12,757                              | 10:00 | 0  | 12,757                                       | 12,757                               | 10:00   | 0   | 12,757                                  | 7,168                | 5:00 |  |
| DELHI            | 4,183                               | 11:00 | 0  | 4,183  | 4,183                                | 11:00   | 0   | 4,183                                   | 1,493                | 4:00 |  |
| UP               | 13,929                              | 19:00 | 100  | 14,029                                       | 14,029                               | 19:00   | 100   | 13,929                                  | 9,986                | 3:00 |  |
| UTTARAKHAND      | 2,088                               | 9:00  | 0  | 2,088  | 2,088                                | 9:00  | 0   | 2,088                                   | 1,220                | 2:00 |  |
| HP               | 1,680                               | 11:00 | 0  | 1,680  | 1,680                                | 11:00   | 0   | 1,680                                   | 774                  | 4:00 |  |
| J&K              | 2,250                               | 20:00 | 563  | 2,813  | 2,813                                | 20:00   | 563   | 2,250                                   | 1,552                | 4:00 |  |
| CHANDIGARH       | 238                                 | 9:00  | 0  | 238  | 238                                  | 9:00  | 0   | 238                                     | 84                   | 3:00 |  |
| NR               | 45,781                              | 19:00 | 704  | 46,485                                       | 46,485                               | 19:00   | 704   | 45,781                                  | 30,051               | 4:00 |  |

## 3(A) State Entities Generation:

| CHANDIGARH           |                |         |             |          |     |            |         |
|----------------------|----------------|---------|-------------|----------|-----|------------|---------|
| Station/Constituents | Inst. Capacity | N/A     | N/A         | Day Peal | ζ.  | Day Energy |         |
| Station/Constituents | (MW)           | Peak MW | Off Peak MW | (MW)     | Hrs | (MU)       | AVG. MW |
| NIL                  |                |         |             |          |     |            |         |
| Total                | 0              | 0       | 0           |          |     | 0          | 0       |
| Total                | 0              | 0       | 0           |          |     | 0          | 0       |

| DELHI   |                |         |             |          |     |            |         |
|---|----------------|---------|-------------|----------|-----|------------|---------|
|   | Inst. Capacity | 19:00   | 03:00       | Day Peal | k   | Day Energy |         |
| Station/Constituents                          | (MW)           | Peak MW | Off Peak MW | (MW)     | Hrs | (MU)       | AVG. MW |
| BADARPUR TPS( 2 * 210 + 3 * 100 )             | 705            | 0       | 0           | 0        |     | -0.02      | -1      |
| RAJGHAT TPS( 2 * 67.5 )                       | 135            | 0       | 0           | 0        |     |            |         |
| Total THERMAL                                 | 840            | 0       | 0           |          |     | -0.02      | -1      |
| BAWANA GPS( 2 * 253 + 4 * 216 )               | 1,370          | 480     | 453         | 0        |     | 11.22      | 468     |
| <b>DELHI GAS TURBINES</b> ( 3 * 34 + 6 * 30 ) | 282            | 107     | 41          | 0        |     | 2.17       | 90      |
| PRAGATI GAS TURBINES( 1 * 121.2 + 2 * 104.6 ) | 331            | 161     | 164         | 0        |     | 3.94       | 164     |
| RITHALA GPS(3*36)                             | 108            | 0       | 0           | 0        |     |            |         |
| Total GAS/NAPTHA/DIESEL                       | 2,091          | 748     | 658         |          |     | 17.33      | 722     |
| WIND  | 0              | 0       | 0           | 0        |     |            |         |
| BIOMASS( 1 * 16 )                             | 16             | 44      | 39          | 0        |     | 1.13       | 47      |
| SOLAR(1*2)                                    | 2              | 0       | 0           | 0        |     |            |         |
| Total DELHI                                   | 2,949          | 792     | 697         |          |     | 18.44      | 768     |

| HARIYANA                                 | Inst. Capacity | 19:00   | 03:00       | Day Pe | ak   | Day Energy   |           |
|--|----------------|---------|-------------|--------|------|--|-----------|
| Station/Constituents                     | ны сарасну     | 17.00   | 03.00       | Day 10 | ak - | Day Energy   | AVG. MW   |
| Station Constituents                     | (MW)           | Peak MW | Off Peak MW | (MW)   | Hrs  | (MU) 12.15 22.52 18.57 10.15 63.39 3.91 3.91 0.43 0.43 | 111011111 |
| DCRTPP (YAMUNA NAGAR)( 2 * 300 )         | 600            | 552     | 489         | 0      |      | 12.15  | 506       |
| JHAJJAR(CLP)( 2 * 660 )                  | 1,320          | 1,118   | 739         | 0      |      | 22.52  | 938       |
| MAGNUM DIESEL (IPP)( 4 * 6.3 )           | 25             | 0       | 0           | 0      |      |  |           |
| PANIPAT TPS( 2 * 210 + 2 * 250 )         | 920            | 808     | 762         | 0      |      | 18.57  | 774       |
| RGTPP( KHEDAR)( 2 * 600 )                | 1,200          | 432     | 382         | 0      |      | 10.15  | 423       |
| Total THERMAL                            | 4,065          | 2,910   | 2,372       |        |      | 63.39  | 2,641     |
| FARIDABAD GPS( 1 * 156.07 + 2 * 137.75 ) | 432            | 158     | 166         | 0      |      | 3.91   | 163       |
| Total GAS/NAPTHA/DIESEL                  | 432            | 158     | 166         |        |      | 3.91   | 163       |
| TOTAL HYDRO HARYANA(1*62)                | 62             | 10      | 12          | 0      |      | 0.43   | 18        |
| Total HYDEL                              | 62             | 10      | 12          |        |      | 0.43   | 18        |
| WIND                                     | 0              | 0       | 0           | 0      |      |  |           |
| BIOMASS( 1 * 106 )                       | 106            | 0       | 0           | 0      |      | 0.89   | 37        |
| SOLAR(1 * 50)                            | 50             | 0       | 0           | 0      |      | 0.1  | 4         |
| Total HARYANA                            | 4,715          | 3,078   | 2,550       |        |      | 68.72  | 2,863     |

| HIMACHAL PRADESH           |                |         |             |          |       |            |         |
|----------------------------|----------------|---------|-------------|----------|-------|------------|---------|
|                            | Inst. Capacity | 19:00   | 03:00       | Day Peal | k     | Day Energy |         |
| Station/Constituents       | (MW)           | Peak MW | Off Peak MW | (MW)     | Hrs   | (MU)       | AVG. MW |
| BASPA (IPP) HPS( 3 * 100 ) | 300            | 30      | 0           | 214      | 08:00 | 1.21       | 50      |
| MALANA (IPP) HPS( 2 * 43 ) | 86             | 40      | 0           | 47       | 09:00 | 0.25       | 10      |
| OTHER HYDRO HP(1 * 372)    | 372            | 104     | 40          | 110      | 19:00 | 2.12       | 88      |
| Total HYDEL                | 758            | 174     | 40          |          |       | 3.58       | 148     |
| WIND                       | 0              | 0       | 0           | 0        |       |            |         |
| BIOMASS                    | 0              | 0       | 0           | 0        |       |            |         |
| SOLAR                      | 0              | 0       | 0           | 0        |       |            |         |
| SMALL HYDRO( 1 * 486 )     | 486            | 147     | 49          | 150      | 19:00 | 2.01       | 84      |
| Total SMALL HYDRO          | 486            | 147     | 49          |          |       | 2.01       | 84      |
| Total HP                   | 1,244          | 321     | 89          |          |       | 5.59       | 232     |

| JAMMU & KASHMIR                  | 1              |         |             | T        |     |            |         |
|----------------------------------|----------------|---------|-------------|----------|-----|------------|---------|
| a                                | Inst. Capacity | 19:00   | 03:00       | Day Peal | k   | Day Energy |         |
| Station/Constituents             | (MW)           | Peak MW | Off Peak MW | (MW)     | Hrs | (MU)       | AVG. MW |
| GAS/DIESEL/OTHERS J&K( 1 * 190 ) | 190            | 0       | 0           | 0        |     |            |         |
| Total GAS/NAPTHA/DIESEL          | 190            | 0       | 0           |          |     | 0          | 0       |
| BAGLIHAR (IPP) HPS(6*150)        | 900            | 138     | 137         | 0        |     | 3.29       | 137     |
| OTHER HYDRO/IPP J&K( 1 * 308 )   | 308            | 96      | 39          | 0        |     | 1.46       | 61      |
| Total HYDEL                      | 1,208          | 234     | 176         |          |     | 4.75       | 198     |
| WIND                             | 0              | 0       | 0           | 0        |     |            |         |
| BIOMASS                          | 0              | 0       | 0           | 0        |     |            |         |
| SOLAR                            | 0              | 0       | 0           | 0        |     |            |         |
| SMALL HYDRO( 1 * 98 )            | 98             | 0       | 0           | 0        |     |            |         |
| Total SMALL HYDRO                | 98             | 0       | 0           |          |     | 0          | 0       |
| Total J&K                        | 1,496          | 234     | 176         |          |     | 4.75       | 198     |

|   | Inst. Capacity | 19:00   | 03:00       | Day Po | eak | Day Energy |         |
|---|----------------|---------|-------------|--------|-----|------------|---------|
| Station/Constituents  | (MW)           | Peak MW | Off Peak MW | (MW)   | Hrs | (MU)       | AVG. MW |
| GOINDWAL(GVK)( 2 * 270 )  | 540            | 290     | 290         | 458    |     | 7.71       | 321     |
| GURU GOBIND SINGH TPS (ROPAR)( 6 * 210 )                          | 1,260          | 0       | 0           | 0      |     | -0.11      | -5      |
| GURU HARGOBIND SINGH TPS (LEHRA<br>MOHABBAT)( 2 * 210 + 2 * 250 ) | 920            | 0       | 0           | 0      |     | -0.12      | -5      |
| GURU NANAK DEV TPS (BHATINDA)( 4 * 110 )                          | 460            | 0       | 0           | 0      |     | -0.01      | 0       |
| RAJPURA(NPL) TPS( 2 * 700 )                                       | 1,400          | 1,320   | 660         | 1,320  |     | 24.3       | 1,013   |
| TALWANDI SABO TPS( 3 * 660 )                                      | 1,980          | 1,630   | 924         | 1,841  |     | 30.85      | 1,285   |
| Total THERMAL   | 6,560          | 3,240   | 1,874       |        |     | 62.62      | 2,609   |
| TOTAL HYDRO PUNJAB( 1 * 1000 )                                    | 1,000          | 430     | 417         | 469    |     | 11.29      | 470     |
| Total HYDEL   | 1,000          | 430     | 417         |        |     | 11.29      | 470     |
| WIND  | 0              | 0       | 0           | 0      |     |            |         |
| BIOMASS( 1 * 303 )  | 303            | 0       | 0           | 0      | 1   | 1.02       | 43      |
| SOLAR(1*859)  | 859            | 0       | 0           | 370    | 1   | 3.8        | 158     |
| Total PUNJAB  | 8,722          | 3,670   | 2,291       |        |     | 78.73      | 3,280   |

| RAJASTHAN   |                |         |             |        |     |   |         |
|---|----------------|---------|-------------|--------|-----|---|---------|
|   | Inst. Capacity | 19:00   | 03:00       | Day Pe | ak  | Day Energy  |         |
| Station/Constituents                                  | (MW)           | Peak MW | Off Peak MW | (MW)   | Hrs | (MU)  2.43  37.13  24.24  26  22.23  18.83  19.54  1.37  151.77  1.46  2.92  2.92  3.26 | AVG. MW |
| BARSINGSAR (IPP) LTPS( 2 * 125 )                      | 250            | 106     | 110         | 0      |     | 2.43  | 101     |
| CHHABRA TPS( 1 * 660 + 4 * 250 )                      | 1,660          | 1,551   | 1,587       | 0      |     | 37.13   | 1,547   |
| GIRAL (IPP) LTPS( 2 * 125 )                           | 250            | 0       | 0           | 0      |     |   |         |
| KALISINDH TPS( 2 * 600 )                              | 1,200          | 1,137   | 792         | 0      |     | 24.24   | 1,010   |
| KAWAI TPS( 2 * 660 )                                  | 1,320          | 1,225   | 864         | 0      |     | 26  | 1,083   |
| KOTA TPS( 2 * 110 + 2 * 195 + 3 * 210 )               | 1,240          | 1,061   | 854         | 0      |     | 22.23   | 926     |
| RAJWEST (IPP) LTPS( 8 * 135 )                         | 1,080          | 808     | 506         | 0      |     | 18.83   | 785     |
| SURATGARH TPS (6 * 250)                               | 1,500          | 907     | 220         | 0      |     | 19.54   | 814     |
| VSLPP (IPP)( 1 * 135 )                                | 135            | 58      | 58          | 0      |     | 1.37  | 57      |
| Total THERMAL   | 8,635          | 6,853   | 4,991       |        |     | 151.77  | 6,323   |
| DHOLPUR GPS(3*110)                                    | 330            | 0       | 0           | 0      |     |   |         |
| RAMGARH GPS( 1 * 110 + 1 * 35.5 + 1 * 50 + 2 * 37.5 ) | 271            | 59      | 58          | 0      |     | 1.46  | 61      |
| Total GAS/NAPTHA/DIESEL                               | 601            | 59      | 58          |        |     | 1.46  | 61      |
| RAPS-A(1*100+1*200)                                   | 300            | 128     | 127         | 0      |     | 2.92  | 122     |
| Total NUCLEAR   | 300            | 128     | 127         |        |     | 2.92  | 122     |
| TOTAL HYDRO RAJASTHAN( 1 * 550 )                      | 550            | 122     | 106         | 0      |     | 3.26  | 136     |
| Total HYDEL   | 550            | 122     | 106         |        |     | 3.26  | 136     |
| WIND  | 4,292          | 253     | 202         | 0      |     | 7   | 292     |
| BIOMASS(1*102)  | 102            | 11      | 11          | 0      |     | 0.27  | 11      |
| SOLAR(1*1995)   | 1,995          | 0       | 0           | 0      |     | 12.58   | 524     |
| Total RAJASTHAN                                       | 16,475         | 7,426   | 5,495       |        |     | 179.26  | 7,469   |

|  | Inst. Capacity | 19:00   | 03:00       | Day P | eak | Day Energy |         |
|--|----------------|---------|-------------|-------|-----|------------|---------|
| Station/Constituents                         | (MW)           | Peak MW | Off Peak MW | (MW)  | Hrs | (MU)       | AVG. MW |
| ANPARA TPS(2*500 + 3 * 210)                  | 1,630          | 702     | 1,244       | 0     |     | 17.17      | 715     |
| ANPARA-C TPS(2 * 600)                        | 1,200          | 1,078   | 578         | 0     |     | 22.15      | 923     |
| ANPARA-D TPS(2 * 500)                        | 1,000          | 938     | 944         | 0     |     | 21.07      | 878     |
| BAJAJ ENERGY PVT LTD (IPP) TPS( 10 * 45      | 450            | 0       | 0           | 0     |     |            |         |
| BARA PPGCL TPS( 3 * 660 )                    | 1,980          | 1,336   | 671         | 0     |     | 22.39      | 933     |
| HARDUAGANJ TPS( 1 * 105 + 1 * 60 + 2 * 250 ) | 665            | 445     | 249         | 0     |     | 9.31       | 388     |
| LALITPUR TPS( 3 * 660 )                      | 1,980          | 617     | 345         | 0     |     | 12.71      | 530     |
| MEJA TPS( 1 * 660 )                          | 660            | 0       | 0           | 0     |     |            |         |
| DBRA TPS ( 2 * 94 + 5 * 200 )                | 1,188          | 526     | 293         | 0     |     | 11.26      | 469     |
| PANKI TPS(2 * 105)                           | 210            | 0       | 0           | 0     |     |            |         |
| PARICHA TPS(2 * 110 + 2 * 210 + 2 * 250)     | 1,160          | 592     | 339         | 0     |     | 12.52      | 522     |
| ROSA TPS(4 * 300)                            | 1,200          | 0       | 0           | 0     |     |            |         |
| TANDA TPS( 4 * 110 )                         | 440            | 388     | 220         | 0     |     | 8.18       | 341     |
| Total THERMAL                                | 13,763         | 6,622   | 4,883       |       |     | 136.76     | 5,699   |
| ALAKHANDA HEP( 4 * 82.5 )                    | 330            | 83      | 82          | 0     |     | 1.31       | 55      |
| VISHNUPARYAG HPS(4 * 110)                    | 440            | 78      | 73          | 0     |     | 1.86       | 78      |
| OTHER HYDRO UP( 1 * 527 )                    | 527            | 150     | 155         | 0     |     | 4.25       | 177     |
| Total HYDEL                                  | 1,297          | 311     | 310         |       |     | 7.42       | 310     |
| WIND   | 0              | 0       | 0           | 0     |     |            |         |
| BIOMASS( 1 * 26 )                            | 26             | 0       | 0           | 0     |     |            |         |
| SOLAR(1*472)                                 | 472            | 0       | 0           | 0     |     | 2.51       | 105     |
| CO-GENERATION(1 * 1360)                      | 1,360          | 900     | 900         | 0     |     | 21.6       | 900     |
| Total OTHERs                                 | 1,360          | 900     | 900         |       |     | 21.6       | 900     |
| Total UP                                     | 16,918         | 7,833   | 6,093       |       |     | 168.29     | 7,014   |

| UTTARAKHAND                                     |                          |                                |                        |                 |          |                |                         |                |               |               |
|---|--------------------------|--------------------------------|------------------------|-----------------|----------|----------------|-------------------------|----------------|---------------|---------------|
| 51.11.10.111                                    |                          | Inst. Capacity                 | 19:00                  | 0:              | 3:00     |                | Day Peak                | (              | Day Energy    | ANG MW        |
| Station/Constituents                            |                          | (MW)                           | Peak MW                | Off Po          | eak MW   | (MW            | C                       | Hrs            | (MU)          | AVG. MW       |
| TOTAL GAS UK(1 * 450)                           |                          | 450                            | 204                    | 1               | 198      | 210            |                         | 08:00          | 4.92          | 205           |
| Total GAS/NAPTHA/DIESEL                         |                          | 450                            | 204                    | 1               | 198      |                |                         |                | 4.92          | 205           |
| OTHER HYDRO UK(1 * 1250)                        |                          | 1,250                          | 570                    | 4               | 148      | 631            |                         | 20:00          | 8.71          | 363           |
| Total HYDEL                                     |                          | 1,250                          | 570                    |                 | 148      |                |                         |                | 8.71          | 363           |
| WIND  |                          | 0                              | 0                      |                 | 0        | 0              |                         |                | 0.00          |               |
| BIOMASS(1 * 127)                                |                          | 127                            | 34                     |                 | 37       | 37             |                         | 02:00          | 0.83          | 35            |
| SOLAR( 1 * 100 )<br>SMALL HYDRO( 1 * 180 )      |                          | 100                            | 0                      |                 | 0        | 80             |                         | 12:00          | 0.46          | 19            |
| Total SMALL HYDRO                               |                          | 180                            | 0                      |                 | 0        | · ·            |                         |                | 0             | 0             |
| Total UTTARAKHAND                               |                          | 2,107                          | 808                    |                 | 683      |                |                         |                | 14.92         | 622           |
| 3(B) Regional Entities Genera                   | tion                     |                                |                        |                 |          |                |                         |                |               |               |
|   | Inst.<br>Capacity        | Declared Capacity              | 19:00                  | 03:00           | Day      | Peak           | Da                      | y Energy       |               |               |
| Station/Constituents                            | (MW)                     | (MW)                           | Peak MW                | Off Peak        | (MW)     | Hrs            | SCHD                    | ACT (MU)       | AVG. MW       | UI            |
| DDMD  | (112117)                 | (2.211)                        | 10411.11               | MW              | (3.211)  | 1110           | (MU)                    | 1101 (1110)    |               |               |
| BBMB<br>BHAKRA HPS( 2 * 108 + 3 * 126           | 1.250                    | <0.5 ==                        | 4.004                  |                 | 1.001    | 10.00          | 16.16                   | 464            | (02           | 0.06          |
| + 5 * 157 )                                     | 1,575                    | 685.77                         | 1,091                  | 543             | 1,091    | 19:00          | 16.46                   | 16.4           | 683           | -0.06         |
| DEHAR HPS(6 * 165)                              | 990                      | 130.73                         | 495                    | 0               | 495      | 19:00          | 3.14                    | 3.23           | 135           | 0.09          |
| PONG HPS(6 * 66)                                | 396                      | 243.75                         | 264                    | 198             | 264      | 19:00          | 5.85<br>25.45           | 5.83           | 243           | -0.02         |
| Sub-Total                                       | 2,765                    | 1,060.25                       | 1,850                  | 741             | -        | -              | 25.45                   | 25.46          | 1,061         | 0.01          |
| NHPC  | 100                      | Δ.                             | Δ.                     |                 | •        |                | •                       |                |               | Δ.            |
| BAIRASIUL HPS( 3 * 60 ) CHAMERA HPS( 3 * 180 )  | 180<br>540               | 535.58                         | 357                    | 0               | 0<br>546 | 18:15          | 1.8                     | 1.86           | 78            | 0.06          |
| CHAMERA II HPS( 3 * 100 )                       | 300                      | 166.45                         | 99                     | 30              | 202      | 08:00          | 1.36                    | 1.86           | 61            | 0.06          |
| CHAMERA III HPS(3 * 77)                         | 231                      | 153                            | 150                    | 0               | 150      | 19:00          | 0.68                    | 0.71           | 30            | 0.03          |
| DHAULIGANGA HPS(4*70)                           | 280                      | 281.38                         | 282                    | 0               | 283      | 07:00          | 1.03                    | 1.09           | 45            | 0.06          |
| DULHASTI HPS(3*130)                             | 390                      | 180                            | 0                      | 123             | 386      | 06:00          | 2.8                     | 2.84           | 118           | 0.04          |
| KISHANGANGA(2*110)                              | 220                      | 29.44                          | 218                    | 0               | 218      | 06:00          | 0.71                    | 0.71           | 30            | 0             |
| PARBATI III HEP( 4 * 130 )                      | 520                      | 0                              | 0                      | 0               | 0        | -              | 0                       |                | -             | 0             |
| SALAL HPS(6 * 115)                              | 690                      | 111.25                         | 348                    | 30              | 348      | 19:00          | 2.67                    | 2.82           | 118           | 0.15          |
| SEWA-II HPS(3*40)                               | 120                      | 120.2                          | 40                     | 0               | 124      | 07:00          | 0.39                    | 0.39           | 16            | 0             |
| TANAKPUR HPS( 1 * 31.42 + 2 * 31.4)             | 94                       | 26.54                          | 26                     | 61              | 65       | 11:00          | 0.64                    | 0.63           | 26            | -0.01         |
| URI HPS( 4 * 120 )                              | 480                      | 118.54                         | 339                    | 35              | 342      | 09:00          | 2.84                    | 2.94           | 123           | 0.1           |
| URI-II HPS( 4 * 60 )                            | 480                      | 72.43                          | 40                     | 78              | 182      | 20:00          | 1.74                    | 1.76           | 73            | 0.02          |
| Sub-Total                                       | 4,525                    | 1,794.81                       | 1,899                  | 357             | -        | -              | 16.66                   | 17.21          | 718           | 0.55          |
| NPCL  |                          |                                |                        |                 |          |                |                         |                |               |               |
| NAPS( 2 * 220 )                                 | 440                      | 204                            | 222                    | 228             | 228      | 01:00          | 4.9                     | 4.87           | 203           | -0.03         |
| RAPS-B(2 * 220)                                 | 440                      | 384                            | 427                    | 427             | 428      | 02:00          | 9.22                    | 9.21           | 384           | -0.01         |
| RAPS-C(2 * 220) Sub-Total                       | 1,320                    | 1,017                          | 475<br>1,124           | 476<br>1,131    | 476      | 01:00          | 10.3<br>24.42           | 10.24<br>24.32 | 427<br>1,014  | -0.06<br>-0.1 |
| NTPC  | 1,320                    | 1,017                          | 1,124                  | 1,131           | •        | -              | 24.42                   | 24.32          | 1,014         | -0.1          |
| ANTA GPS(1 * 153.2 + 3 * 88.71)                 | 419                      | 418.17                         | 0                      | 0               | 0        |                | 0                       |                | T . T         | 0             |
| AURAIYA GPS( 2 * 109.3 + 4 *                    | 663                      | 646.59                         | 0                      | 0               | 0        | -              | 0                       | -              | -             | 0             |
| 111.19 )<br>DADRI GPS( 2 * 154.51 + 4 *         | 830                      | 408.96                         | 229                    | 225             | 418      | _              | 6.76                    | 6.65           | 277           | -0.11         |
| 130.19)   |                          |                                |                        | <u> </u>        |          |                |                         |                |               |               |
| DADRI SOLAR(1*5)                                | 5<br>840                 | 0.65                           | 570                    | 314             | 3<br>570 | 12:17          | 0.02<br>11.22           | 0.01<br>11.05  | 460           | -0.01         |
| DADRI-I TPS( 4 * 210 )  DADRI-II TPS( 2 * 490 ) | 980                      | 576.45<br>928.55               | 930                    | 533             | 930      | 19:00<br>19:00 | 18.29                   | 18.88          | 787           | 0.59          |
| ISTPP (JHAJJAR)( 3 * 500 )                      | 1,500                    | 947.5                          | 980                    | 580             | 1,030    | 10:25          | 19.51                   | 19.37          | 807           | -0.14         |
| KOLDAM HPS( 4 * 200 )                           | 800                      | 872                            | 389                    | 0               | 811      | 18:00          | 2.62                    | 2.62           | 109           | 0             |
| RIHAND-I STPS(2 * 500)                          | 1,000                    | 922.5                          | 980                    | 903             | 980      | 19:00          | 21.76                   | 21.91          | 913           | 0.15          |
| RIHAND-II STPS(2*500)                           | 1,000                    | 878.93                         | 981                    | 946             | 981      | 19:00          | 20.85                   | 20.36          | 848           | -0.49         |
| RIHAND-III STPS( 2 * 500 )                      | 1,000                    | 942.5                          | 998                    | 765             | 998      | 19:00          | 21.47                   | 21.9           | 913           | 0.43          |
| SINGRAULI STPS( 2 * 500 + 5 * 200 )             | 2,000                    | 1,385                          | 1,528                  | 1,383           | 1,532    | 10:00          | 32.62                   | 32.62          | 1,359         | 0             |
| SINGRAULI SOLAR(1*15)                           | 15                       | 2.45                           | 0                      | 0               | 0        | -              | 0.06                    | 0.06           | 3             | 0             |
| UNCHAHAR II TPS( 2 * 210 )                      | 420                      | 318.11                         | 291                    | 234             | 291      | 19:00          | 6.36                    | 6.23           | 260           | -0.13         |
| UNCHAHAR III TPS( 1 * 210 )                     | 210                      | 191.1                          | 210                    | 116             | 210      | 19:00          | 3.86                    | 3.8            | 158           | -0.06         |
| UNCHAHAR IV TPS(1 * 500)                        | 500                      | 471.25                         | 460                    | 287             | 460      | 19:00          | 9.45                    | 9.2            | 383           | -0.25         |
| UNCHAHAR SOLAR(1*10)                            | 10                       | 1.65                           | 0                      | 0               | 0        | 40.00          | 0.04                    | 0.03           | 1             | -0.01         |
| UNCHAHAR TPS( 2 * 210 ) Sub-Total               | 420<br>12,612            | 382.2<br>10,294.56             | 8,963                  | 6,528           | 417      | 19:00          | 7.78<br>182.67          | 7.66<br>182.35 | 319<br>7,597  | -0.12         |
| SJVNL   | 12,012                   | 10,474.50                      | 0,503                  | 0,528           | -        | -              | 104.07                  | 104.33         | 1,591         | -0.34         |
| SJ V NL<br>NATHPA-JHAKRI HPS( 6 * 250           | 1 500                    | 1 240 20                       | 1 225                  |                 | 1 225    | 07.00          | -                       | 715            | 200           | Λ 15          |
| )   | 1,500                    | 1,249.38                       | 1,225                  | 0               | 1,325    | 07:00          | 7                       | 7.15           | 298           | 0.15          |
| RAMPUR HEP( 6 * 68.67 )                         | 412                      | 344.38                         | 301                    | 0               | 370      | 18:00          | 1.95                    | 2.04           | 85            | 0.09          |
| Sub-Total                                       | 1,912                    | 1,593.76                       | 1,526                  | 0               | -        | -              | 8.95                    | 9.19           | 383           | 0.24          |
| THDC  |                          |                                | Ī                      | 1               | Г        | Г              |                         |                |               |               |
| KOTESHWAR HPS(4 * 100)                          | 400                      | 150.31                         | 401                    | 0               | 402      | 18:00          | 3.18                    | 3.2            | 133           | 0.02          |
|   | 4.000                    |                                |                        |                 |          |                |                         | 9.43           |               | 0.1           |
| TEHRI HPS(4 * 250)                              | 1,000                    | 1,064                          | 992                    | 0               | 1,020    | 17:00          | 9.33                    |                | 393           |               |
|   | 1,000<br>1,400<br>24,534 | 1,064<br>1,214.31<br>16,974.69 | 992<br>1,393<br>16,755 | 0<br>0<br>8,757 | -        | -              | 9.33<br>12.51<br>270.66 | 12.63          | 526<br>11,299 | 0.12          |

|                                     | (            | Inst.          | Declared Ca                   | pacity         |              | 19:00           | 03:00  | Day           | Peak           | Da           | ny Energy          |               |                 |
|-------------------------------------|--------------|----------------|-------------------------------|----------------|--------------|-----------------|--|---------------|----------------|--------------|--------------------|---------------|-----------------|
| Station/Constituer                  |              | (MW)           | (MW)                          |                | Po           | eak MW          | Off Peak<br>MW                                   | (MW)          | Hrs            | SCHD<br>(MU) | ACT (MU)           | AVG. MW       | UI              |
| PP                                  |              | 100            |                               |                |              |                 |  |               | 40.00          |              | 0.45               | 1 40 1        |                 |
| ADHPL(IPP) HPS( 2                   | · ·          | 192<br>70      | 0                             |                |              | 79              | 0  | 96<br>35      | 10:00          | 0.44         | 0.46               | 19            | 0.02            |
| BUDHIL HPS (IPP)(<br>KARCHAM WANGTO | <i>′</i>     | 1,000          | 0                             |                |              | 825             | 0  | 825           | 12:00<br>19:00 | 0.24<br>3.79 | 0.21<br>3.87       | 9 161         | -0.03           |
| * 250 )                             | ·            |                |                               |                |              |                 |  |               |                |              |                    |               |                 |
| MALANA2(2 * 5<br>SAINJ HEP(2 * 5    |              | 100<br>50      | 0                             |                |              | 100             | 0  | 100           | 10:00          | 0.24         | 0.25               | 10            | 0.01            |
| SHREE CEMENT (IPP                   | -            | 300            | 0                             |                |              | 144             | 70   | 145           | 21:00          | 2.92         | 2.9                | 121           | -0.02           |
| 150)                                | <u> </u>     | ļ              |                               |                |              |                 |  | <u> </u>      | 21.00          |              |                    |               |                 |
| Sub-Total<br>Fotal                  |              | 1,712<br>1,712 | 0                             |                |              | 1,148           | 70   | -             | -              | 8.01<br>8.01 | 8.08<br>8.08       | 336<br>336    | 0.07            |
|                                     |              | 1,712          |                               |                |              | 1,140           | 70   |               |                | 0.01         | 0.00               | 330           | 0.07            |
| Summary Section                     |              |                | T C                           | ., 1           |              | DE A IZ         |  | OFF DEAK      |                |              | Т.                 |               | ANG             |
| Fotal State Control Area            | Conoration   |                | Inst. Capa<br>54,626          |                |              | PEAK<br>24,162  |  | 18,074        |                | Di           | sy Energy<br>538.7 |               | y AVG.<br>2,446 |
| I. Net Inter Regional Ex            |              | ort            | 34,020                        |                |              |                 |  |               |                |              |                    | -             |                 |
| (+ve)/Export (-ve)]                 | change (impo | ,,,,,          |                               |                |              | 6,943           |  | 6,048         |                |              | 158.27             | 9             | ,104            |
| Fotal Regional Availabil            | lity(Gross)  |                | 80,872                        |                |              | 49,008          |  | 32,949        |                |              | 976.21             | 4:            | 3,185           |
| Total Hydro Generation              | l            |                |                               |                |              |                 |  |               |                |              |                    |               |                 |
|                                     |              |                | Inst. Capa                    | city           |              | PEAK            |  | OFF-PEAK      |                | Da           | ny Energy          | Day           | y AVG.          |
| Regional Entities Hydro             |              |                | 12,814                        |                |              | 8,061           |  | 1,098         |                |              | 72.29              | 3             | 3,012           |
| State Control Area Hydi             | ro           |                | 6,125                         |                |              | 1,851           |  | 1,509         |                |              | 39.44              |               | ,643            |
| Total Regional Hydro                |              |                | 18,939                        |                |              | 9,912           |  | 2,607         |                |              | 111.73             | 4             | 1,655           |
| Total Renewable Genera              | ation        |                |                               |                |              |                 |  |               |                |              |                    |               |                 |
|                                     |              |                | Inst. Capa                    | city           |              | PEAK            |  | OFF-PEAK      |                | Da           | ny Energy          | Day           | y AVG.          |
| Regional Entities Renew             |              |                | 30                            |                |              | 0               |  | 0             |                |              | 0.1                |               | 4               |
| State Control Area Rene             |              |                | 9,214                         |                |              | 489             |  | 338           |                |              | 32.6               |               | ,358            |
| Total Regional Renewab              | ole          |                | 9,244                         |                |              | 489             |  | 338           |                |              | 32.7               | 1             | ,362            |
| (A) INTER-REGIO                     | NAL EXCH     | ANGES (        | Import=(+ve) /I               |                |              |                 |  |               |                |              | T                  |               |                 |
| SL.No.                              |              | Element        | _                             | 19:00          |              | 03:00           |  | Maximum Inter |                | ATTO         | Import in MU       | Export in     | NET             |
|                                     |              |                |                               | (MW            | ·            | MW              | •  | rt (MW)       | Export (       | MW)          |                    | MU            | -               |
| 1                                   | 132KV        | -Garhwa-       | Dihand                        | Impor          | t/Export bet | ween EAST REGIO | N and NOR  | - REGION      | _              |              |                    |               |                 |
|                                     |              |                | -Sahupuri(U                   |                |              | <u> </u>        |  | <u>-</u>      | -              |              | 0.48               | 0             | 0.48            |
| 3                                   |              |                | nagar(PG)                     | 12             |              | 31              |  | •             | 34             |              | 0.40               | 0.65          | -0.65           |
|                                     |              |                | Sahupuri(UP)                  | 120            |              | 80              | 1  | 126           | 0              |              | 2.42               | 0             | 2.42            |
|                                     |              |                | G)-Balia(PG)                  | 398            |              | 240             |  | 595           | 0              |              | 9.89               | 0             | 9.89            |
| 6 40                                | 0KV-Bihars   | sharif(PG      | )-Varanasi(P                  | 16             |              | 50              | 2  | 216           | 50             |              | 1.72               | 0             | 1.72            |
| 7                                   | 400KV-Fa     | tehpur(U       | P)-Sasaram                    | -              |              | -               |  | -             | -              |              | -                  | -             | -               |
| 8 40                                | 0KV-Motih    | ari(DMT        | )-Gorakhpur                   | 238            |              | 226             | 3  | 338           | 0              |              | 5.63               | 0             | 5.63            |
| 9 40                                | 00KV-Muzai   | ffarpur(P      | G)-Gorakhp                    | 344            |              | 80              | 4  | 172           | 0              |              | 7.01               | 0             | 7.01            |
| 10                                  |              |                | ·Balia(PG)                    | 921            |              | 725             |  | 180           | 0              |              | 23.37              | 0             | 23.37           |
| 11                                  |              |                | ahabad(PG)                    | 84             |              | 30              |  | 52            | 0              |              | 0.48               | 0             | 0.48            |
| 12                                  |              |                | ranasi(PG)                    | 112            |              | 113             |  | 151           | 0              |              | 2.82               | 0             | 2.82            |
| 13                                  |              |                | G)-Sasaram.                   | -49            |              | -35             |  | 139           | 68             |              | 0.8                | 0             | 0.8             |
| 14<br>15                            |              |                | Balia(PG)                     | 385            |              | 277             |  | 545<br>547    | 0              |              | 9.39               | 0             | 9.39            |
|                                     |              |                | aranasi(PG)<br>uar-Agra(PG)   | 218            |              | 117             | 2  | 947           | 0              |              | 7.53               | 0             | 7.53            |
|                                     | tal EAST R   | _              | uai-Agra(FG)                  | 2,799          | 9            | 1,934           | 4,   | 361           | 152            | ,            | 71.54              | 0.65          | 70.89           |
|                                     |              |                | <u>'</u>                      |                |              | NORTH_EAST RI   | EGION and N                                      | NORTH REGIO   | ON             |              | <u> </u>           |               |                 |
|                                     |              |                | thCharialli                   | 500            |              | 500             |  | 0             | 500            |              | 0                  | 12.1          | -12.1           |
| Sub-Total N                         | ORTH_EA      | ST REGI        | ON                            | 500            |              | 500             |  | 0             | 500            | 1            | 0                  | 12.1          | -12.1           |
| 1 2                                 | 20KV-Auro    | iva(NT).N      | Malanpur(PG)                  | -33            |              | ween WEST REGIO | AN AHU NOK                                       | III KEGIUN    | 39             |              | 0                  | 0.62          | -0.62           |
| 2                                   |              | • • •          | -Kota(PG)                     | 28             |              | -16             | 1  | 132           | 65             |              | 0.78               | 0.02          | 0.78            |
| 3                                   |              |                | Modak(RJ)                     | -              |              | -10             | <del>                                     </del> | •             | -              |              | -                  | -             | -               |
| 4                                   |              |                | P)-Sujalpur                   | -256           | i            | -193            | 3  | 344           | 0              |              | 0                  | 2.6           | -2.6            |
| 5 40                                |              |                | G)-Rihand(N                   | -947           | ,            | -724            |  | -             | 974            |              | 0                  | 21.9          | -21.9           |
| 6                                   | 400KV-Zer    | da(PG)-B       | Shinmal(PG)                   | 40             |              | 12              | 2  | 280           | 80             |              | 2.58               | 0             | 2.58            |
| 7                                   | 400KV-Zer    | da(PG)-K       | Kankroli(RJ)                  | -85            |              | -141            | 1  | 161           | 141            |              | 0                  | 0.81          | -0.81           |
| 8                                   |              | 0rai-Gwa       | ` ′                           | -377           |              | -328            |  | 0             | 551            |              | 0                  | 9.57          | -9.57           |
| 9                                   |              | V-0rai-Ja      | _                             | 703            |              | 815             |  | 255           | 0              |              | 21.79              | 0             | 21.79           |
| 10                                  |              | KV-0rai-S      |                               | 1,03           |              | 991             |  | 181           | 0              |              | 25.93              | 0             | 25.93           |
| 11                                  |              |                | )-Agra(PG)                    | 1,90           | 3            | 1,481           |  | 048           | 0              |              | 39.45              | 0             | 39.45           |
| 12                                  |              | 0 . ,          | Swalior(PG)                   | 85             |              | 353             |  | 289           | -              |              | 8.47               | 0             | 8.47            |
| ш                                   |              |                | (JH)-Mohind<br>chal(PG)-Vindl | 1,202          |              | 801             |  | 205           | 0              |              | 25.73              | 0             | 25.73           |
| 14                                  |              | B/B            | L                             | -230           |              | 0               |  | 0             | 250            | 1            | 0                  | 3.25          | -3.25           |
|                                     |              | _              | (PG)-Kuruks                   | 600            |              | 600             | 1  | 500           | 0              |              | 13.5               | 0             | 13.5            |
| Sub-To                              | tal WEST R   |                |                               | 3,644<br>6,943 |              | 3,614<br>6,048  |  | ,856          | 2,10<br>2,75   |              | 138.23<br>209.77   | 38.75<br>51.5 | 99.48<br>158.27 |
| TOTA                                | I ID DVA     |                |                               |                |              |                 |  | 470           |                | /.           | /119.77            |               | 158.27          |

4(B) Inter Regional Schedule & Actual Exchange (Import=(+ve) /Export =(-ve)) in MU

|       | ISGS/(LT+MT) Schedule | BILT Schedule | PX Schedule | Total IR Schedule | Actual | NET IR UI |
|-------|-----------------------|---------------|-------------|-------------------|--------|-----------|
| NR-ER | 50.83                 | -16.16        | 7.28        | 41.95             | 70.89  | 28.94     |

| Maxir                             | num      | M         | linimum  | Average   | Freq<br>Variation | Standard  | Freq. in 15 | mnt blk | Freq Dev Ind              |
|-----------------------------------|----------|-----------|----------|-----------|-------------------|-----------|-------------|---------|---------------------------|
| Frequency                         | Time     | Frequency | Time     | Frequency | Index             | Deviation | Max.        | Min.    | (% of Time                |
| 50.13                             | 12:03:40 | 49.78     | 21:10:50 | 49.96     | 0.05              | 0.058     | 50.07       | 49.85   | 22                        |
| 6.Voltage Profile: 400            | 0kV      |           |          |           |                   |           |             |         |                           |
|                                   | Ma       | nximum    | Minin    | ıum       |                   | Volta     | ge (in %)   |         | Voltage - Deviation Index |
| STATION                           | VOLTAGE  | TIME      | VOLTAGE  | TIME      | < 380             | < 390     | > 420       | > 430   | (% of time                |
| Abdullapur(PG) -<br>400KV         | 429      | 02:55     | 414      | 08:40     | 0                 | 0         | 64.58       | 0       | 64.58                     |
| Amritsar(PG) -<br>400KV           | 427      | 04:00     | 412      | 07:45     | 0                 | 0         | 52.08       | 0       | 52.08                     |
| Ballabgarh(PG) - 400KV            | 426      | 04:00     | 408      | 10:20     | 0                 | 0         | 28.13       | 0       | 28.13                     |
| Bareilly II(PG) -<br>400KV        | 421      | 03:15     | 403      | 08:35     | 0                 | 0         | 3.47        | 0       | 3.47                      |
| Bareilly(UP) -                    | 422      | 04:00     | 404      | 08:35     | 0                 | 0         | 11.46       | 0       | 11.46                     |
| Baspa(HP) -                       | 434      | 04:05     | 416      | 07:25     | 0                 | 0         | 71.18       | 13.89   | 71.18                     |
| 400KV   L<br>Bassi(PG) - 400KV    | 421      | 04:00     | 385      | 08:35     | 0                 | 6.6       | .35         | 0       | .35                       |
| Bawana(DTL) -<br>400KV            | 429      | 04:00     | 413      | 10:20     | 0                 | 0         | 66.67       | 0       | 66.67                     |
| Dadri HVDC(PG).<br>- 400KV        | 428      | 04:00     | 428      | 04:00     | 1.04              | 1.04      | 49.31       | 0       | 50.35                     |
| Gorakhpur(PG) -<br>400KV          | 420      | 04:00     | 404      | 17:55     | 0                 | 0         | 0           | 0       | 0                         |
| Hisar(PG) -                       | 425      | 04:00     | 409      | 08:40     | 0                 | 0         | 31.94       | 0       | 31.94                     |
| 400KV<br>Kanpur(PG) -             | 424      | 04:00     | 410      | 08:35     | 0                 | 0         | 28.13       | 0       | 28.13                     |
| 400KV<br>Kashipur(UT) -           | 402      | 00:00     | 402      | 00:00     | 0                 | 0         | 0           | 0       | 0                         |
| 400KV<br>Kishenpur(PG) -          | 421      | 04:00     | 408      | 11:50     | 0                 | 0         | 8.68        | 0       | 8.68                      |
| 400KV — Moga(PG) -                | 418      | 23:55     | 399      | 10:15     | 0                 | 0         | 0           | 0       | 0                         |
| 400KV<br>Nallagarh(PG) -<br>400KV | 434      | 04:05     | 416      | 07:25     | 0                 | 0         | 71.18       | 13.89   | 71.18                     |
| Rihand<br>HVDC(PG) -              | 408      | 03:35     | 408      | 03:35     | 7.99              | 7.99      | 0           | 0       | 7.99                      |
| 400KV<br>Rihand(NT) -             | 407      | 04:00     | 401      | 17:50     | 0                 | 0         | 0           | 0       | 0                         |
| 400KV                             | 407      | 04.00     | 401      | 17.50     | · ·               | U         | <b>U</b>    |         | <u> </u>                  |
| 6.1 Voltage Profile: 7            |          |           |          |           |                   |           |             |         |                           |
|                                   | Ma       | nximum    | Minin    | num       |                   | Volta     | ge (in %)   |         | Voltage<br>Deviation      |
| STATION                           | VOLTAGE  | TIME      | VOLTAGE  | TIME      | < 728             | < 742     | > 800       | > 820   | Index<br>(% of time       |
| Anta RS(RJ) -                     | 793      | 04:05     | 764      | 08:30     | 0                 | 0         | 0           | 0       | 0                         |
| 765KV └<br>Balia(PG) - 765KV      | 788      | 04:00     | 764      | 08:20     | 0                 | 0         | 0           | 0       | 0                         |
| Bareilly II(PG) -                 | 802      | 04:00     | 769      | 08:35     | 0                 | 0         | 7.99        | 0       | 7.99                      |
| 765KV                             | 803      | 17:00     | 774      | 08:35     | 0                 | 0         | 13.54       | 0       | 13.54                     |
| 765KV                             | 790      | 17:00     | 754      | 08:35     | 0                 | 0         | 0           | 0       | 0                         |
| 765KV                             | 805      | 04:00     | 773      | 08:40     | 0                 | 0         | 10.76       | 0       | 10.76                     |
| 765KV<br>Lucknow II(PG) -         | 799      | 04:00     | 768      | 08:35     | 0                 | 0         | 0           | 0       | 0                         |
| 765KV Meerut(PG) -                | 804      | 17:00     | 774      | 06:10     | 0                 | 0         | 9.38        | 0       | 9.38                      |
| 765KV<br>Moga(PG) -               | 795      | 17:00     | 768      | 20:20     | 0                 | 0         | 0           | 0       | 9.36                      |
| 765KV                             |          |           |          |           |                   | <u> </u>  |             |         | 1                         |
| Phagi(RJ) - 765KV<br>Unnao(UP) -  | 799      | 03:10     | 766      | 09:50     | 0                 | 0         | 0           | 0       | 0                         |
| Unnao(UP) -<br>765KV              | 780      | 04:00     | 732      | 08:35     | 0                 | .69       | 0           | 0       | 0                         |

NR-WR

Total

**5.Frequency Profile** 

142.02

192.85

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

Element Peak

< 49.2

0

132KV-Tanakpur(NH)-Mahendranagar(PG)

RANGE(Hz)

%

<------>Frequency (Hz)----->

-21.73

-37.89

Peak MW

-27.7

< 49.8

.2

< 49.7

0

Off-Peak MW

-30.05

< 49.9

15.8

-6.97

0.31

Import

< 50.0

73.4

>= 49.9 - <= 50.05

78

113.32

155.27

31

> 50.05 - <= 50.1

5.1

Maximum Interchange(MW)
Import Export

99.48

158.27

Import

> 50.1 - <= 50.2

.6

Energy (MU)
nport Export

0.6759

> 50.2

0

-13.84

3

Net Energy (MU)

-0.6759

> 50.05

5.7

### 7(A). Short-Term Open Access Details:

|                     |                | Off- Peak Hours (03:00 | 0)        | Peak Hours (19:00) Day Energy (MU |          |           | ergy (MU)                    |               |             |            |
|---------------------|----------------|------------------------|-----------|-----------------------------------|----------|-----------|------------------------------|---------------|-------------|------------|
| State               | Bilateral (MW) | IEX (MW)               | PXIL (MW) | Bilateral<br>(MW)                 | IEX (MW) | PXIL (MW) | ISGS<br>/(LT+MT)<br>Schedule | BILT Schedule | PX Schedule | Total (MU) |
| PUNJAB              | -1,453.07      | 49.42                  | 0         | -1,453.07                         | 0        | 0         | 65.45                        | -34.96        | -0.48       | 30.02      |
| HARYANA             | -943.57        | 136.14                 | 0         | -966.4                            | 154.77   | 0         | 78.61                        | -24.75        | 2.18        | 56.04      |
| RAJASTHAN           | -52.92         | 109.32                 | 0         | -52.92                            | -930.3   | 0         | 61.2                         | -0.13         | 0.11        | 61.19      |
| DELHI               | -706.35        | -594.96                | 0         | -558                              | -240.82  | 0         | 70.97                        | -16.2         | -3.26       | 51.52      |
| UTTAR PRADESH       | 25.94          | 0                      | 0         | 66.74                             | 28.3     | 0         | 120.89                       | -3.71         | 0           | 117.19     |
| UTTARAKHAND         | 571.44         | -107.56                | 0         | 439.71                            | 47.15    | 0         | 11.41                        | 11.64         | 0.22        | 23.27      |
| HIMACHAL<br>PRADESH | 564.57         | 1.58                   | 0         | 385.85                            | 334.87   | 0         | 11.53                        | 14.46         | -1.26       | 24.73      |
| JAMMU &<br>KASHMIR  | 611.51         | 98.83                  | 0         | 611.51                            | 543.56   | 0         | 25.78                        | 14.68         | 5.2         | 45.65      |
| CHANDIGARH          | 0              | -15.18                 | 0         | 0                                 | 0        | 0         | 3.84                         | 0             | -0.43       | 3.41       |
| TOTAL               | -1,382.45      | -322.41                | 0         | -1,526.58                         | -62.47   | 0         | 449.68                       | -38.97        | 2.28        | 413.02     |

7(B). Short-Term Open Access Details

|                     | ISGS/(LT+MT) Schedule |          | Bilateral ( | MW)       | IEX (M   | IEX (MW)  |         | PXIL (MW) |  |
|---------------------|-----------------------|----------|-------------|-----------|----------|-----------|---------|-----------|--|
| State               | Maximum               | Minimum  | Maximum     | Minimum   | Maximum  | Minimum   | Maximum | Minimum   |  |
| PUNJAB              | 3,596.15              | 2,273.2  | -1,453.07   | -1,782.93 | 197.66   | -404.74   | 0       | 0         |  |
| HARYANA             | 4,346.66              | 2,150.78 | -756.53     | -1,276.86 | 159.58   | -507.95   | 0       | 0         |  |
| RAJASTHAN           | 3,845.47              | 1,420.59 | 237.57      | -222.29   | 1,106.68 | -1,539.81 | 0       | 0         |  |
| DELHI               | 3,693.02              | 2,070.11 | -406.12     | -823.72   | 722.43   | -715.37   | 0       | 0         |  |
| UTTAR PRADESH       | 6,459.48              | 3,743.44 | 456.08      | -754.67   | 72.21    | -606.87   | 0       | 0         |  |
| UTTARAKHAND         | 828.38                | 245.59   | 571.44      | 439.71    | 248.44   | -231.55   | 0       | 0         |  |
| HIMACHAL<br>PRADESH | 1,219.16              | 112.69   | 847.82      | 385.56    | 334.87   | -718.49   | 0       | 0         |  |
| JAMMU &<br>KASHMIR  | 1,690.15              | 737.2    | 611.51      | 611.51    | 543.56   | -144.9    | 0       | 0         |  |
| CHANDIGARH          | 278.47                | 102.66   | 0           | 0         | 19.57    | -91.07    | 0       | 0         |  |

8.Major Reservoir Particulars

|               | Para       | ameters   | Present Pa  | LAST Y      | EAR         | LAST DAY    |                  |              |
|---------------|------------|-----------|-------------|-------------|-------------|-------------|------------------|--------------|
| RESERVOIR     | MDDL (Mts) | FRL (Mts) | Level (Mts) | Energy (MU) | Level (Mts) | Energy (MU) | Inflow<br>(m3/s) | Usage (m3/s) |
| Bhakra        | 445.62     | 513.59    | 504.29      | 1,272       | 498.36      | 1,030       | 165.68           | 438.97       |
| Chamera-I     | 748.75     | 760       | 755.35      | -           | -           | -           | 54.51            | 50.11        |
| Gandhisagar   | 295.78     | 295.78    | -           | -           | -           | -           | -                | 0            |
| Jawahar Sagar | 295.78     | 298.7     | -           | -           | -           | -           | -                | 0            |
| Koteshwar     | 598.5      | 612.5     | 611.23      | 5           | 610.21      | 5           | 217              | 210.89       |
| Pong          | 384.05     | 426.72    | 415.1       | 681         | 409.75      | 484         | 59.69            | 357.27       |
| RPS           | 343.81     | 352.8     | -           | -           | -           | -           | -                | 0            |
| RSD           | 487.91     | 527.91    | 516.25      | 3           | 503.85      | 3           | 62.45            | 133.3        |
| Rihand        | 252.98     | 268.22    | 260.73      | 245         | 261.06      | 364         | 0                | 11,693.72    |
| Tehri         | 740.04     | 829.79    | 812.16      | 845         | 808.6       | 775         | 49.17            | 217          |
| TOTAL         | -          | •         | -           | 3,051       | -           | 2,661       | 608.5            | 13,101.26    |

#### 9. System Reliability Indices (Violation of TTC and ATC):

| (i)%age of times N-1 Criteria was violated in the inter - regional corridors |
|--|
|--|

| WR           | 0 |
|--------------|---|
| ER           | 0 |
| Simultaneous | 0 |

## ii)% age of times ATC violated on the inter-regional corridors $\,$

| WR           | 0 |
|--------------|---|
| ER           | 0 |
| Simultaneous | 0 |

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

| Rihand-Dadri   | 0   |
|----------------|-----|
| Killaliu-Dauli | U U |

## 10. Zero Crossing Violations

| State            | No. of violations(Maximum 8 in a day) | Maximum number of continuous blocks without sign change |
|------------------|---------------------------------------|---|
| CHANDIGARH       | 11                                    | 45  |
| DELHI            | 8                                     | 27  |
| HARYANA          | 1                                     | 7   |
| HIMACHAL PRADESH | 5                                     | 13  |
| JAMMU & KASHMIR  | 5                                     | 14  |
| PUNJAB           | 3                                     | 11  |
| RAJASTHAN        | 3                                     | 12  |
| UTTAR PRADESH    | 0                                     | 6   |
| UTTARAKHAND      | 7                                     | 18  |

11. Significant events (If any):

| 14.Synchronisation of new generating units:  |                 |
|--|-----------------|
|  |                 |
| 15.Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :   |                 |
| 500 MVA ICT-1 at Azamgarh first time charged at 13:36 hrs on no load   |                 |
| 16.Tripping of lines in pooling stations :   |                 |
| 17.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. |                 |
|  | Shift In Charge |
|  |                 |
|  |                 |
|  |                 |
|  |                 |
|  |                 |
|  |                 |
|  |                 |
|  |                 |
|  |                 |

 ${\bf 12. Grid\ Disturbance\ /\ Any\ Other\ Significant\ Event:}$ 

13. Weather Conditions :