

### Availability at Daily Maximum Demand Hour

|                     |                  |
|---------------------|------------------|
| ST-Coal             | 0 MW             |
| ST-Gas              | 0 MW             |
| ST-Oil              | 0 MW             |
| Hydro               | 2,510 MW         |
| Distillate          | 0 MW             |
| <b>Total TNB</b>    | <b>2,510 MW</b>  |
| <b>Total IPP</b>    | <b>16,524 MW</b> |
| <b>Total Co-Gen</b> | <b>0 MW</b>      |
| <b>Total System</b> | <b>22,038 MW</b> |

### Generation Mix

| Type                    | MWh            | Percentage      |
|-------------------------|----------------|-----------------|
| Hydro                   | 9,791          | 3.01 %          |
| Gas                     | 47,170         | 14.50 %         |
| <b>Total TNB</b>        | <b>56,961</b>  | <b>17.51 %</b>  |
| ST-Coal                 | 190,505        | 58.56 %         |
| LSS                     | 4,769          | 1.47 %          |
| Gas                     | 73,590         | 22.62 %         |
| <b>Total IPP</b>        | <b>268,864</b> | <b>82.65 %</b>  |
| Co-Gen                  | -1,454         | -0.45 %         |
| <b>Total Co-Gen</b>     | <b>-1,454</b>  | <b>-0.45 %</b>  |
| <b>Total Generation</b> | <b>324,371</b> | <b>99.71 %</b>  |
| PLTG                    | -233           | -0.07 %         |
| HVDC                    | -697           | -0.21 %         |
| <b>Interconnection</b>  | <b>-930</b>    | <b>-0.29 %</b>  |
| <b>Net Energy</b>       | <b>325,301</b> | <b>100.00 %</b> |

### Maximum Demand Record

|                 |             |
|-----------------|-------------|
| Date: 5/11/2023 | 19,716 MW   |
| Date: 5/11/2023 | 416,902 MWH |

### Set On Bus, TNB, IPP And MD

|                               |               |
|-------------------------------|---------------|
| Daily Maximum Demand Hour at: | 20:00:00 Hour |
| Total Set On Bus              | 17,248 MW     |
| TNB Generation                | 3,344 MW      |
| IPP Generation                | 12,292 MW     |
| Spinning Reserve              | 1,692 MW      |
| Maximum Demand                | 15,599 MW     |
| Net Energy                    | 325,301 MWH   |
| Load Factor                   | 86.89 %       |

### Fuel Cost

|               |                  |
|---------------|------------------|
| Total Cost:   | 77,295,343.25 RM |
| Cost per Unit | 23.62 cents/kWH  |

### Average Spinning Reserve During Peak Hour

| Type         | MW           |
|--------------|--------------|
| GT           | 403          |
| Hydro        | 169          |
| Syncon       | 1,099        |
| Thermal      | 499          |
| <b>Total</b> | <b>2,170</b> |

### Time Weather Temperature

|           |       |    |
|-----------|-------|----|
| Afternoon | Hot   | 32 |
| Morning   | Sunny | 28 |

### Gas Usage

| Station                   | (mmscfd)   |
|---------------------------|------------|
| GLGR                      | 29         |
| TJGS                      | 73         |
| <b>Total TNB</b>          | <b>102</b> |
| CBPS                      | 44         |
| EMPP                      | 183        |
| NPRI                      | 135        |
| PCGP                      | 83         |
| PLPS                      | 38         |
| SPGP                      | 205        |
| <b>Total IPP</b>          | <b>687</b> |
| <b>Total Gas</b>          | <b>790</b> |
| <b>Total Gas Required</b> | <b>790</b> |

### Alternate Fuel Usage

| Station      | (mmscfd) |
|--------------|----------|
| <b>Total</b> | <b>0</b> |

### Hourly System MW Generation

|              | 00:00 | 01:00 | 02:00 | 03:00 | 04:00 | 05:00 | 06:00 | 07:00 | 08:00 | 09:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| System Total | 14205 | 13722 | 13116 | 12719 | 12451 | 12285 | 12474 | 12289 | 11734 | 12258 | 12782 | 13159 | 13121 | 13174 | 13402 | 13683 | 14227 | 14045 | 14068 | 15144 | 15599 | 15496 | 15206 | 14700 |

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Wednesday, December 6, 2023 5:47:58 PM  
 (Ir. Shanmugam Thoppalan)  
 Head  
 Grid System Operator





### Daily MW Generation on Sunday

| Station         | Unit | 0000  | 0100  | 0200  | 0300  | 0400  | 0500  | 0600  | 0700  | 0800  | 0900  | 1000  | 1100  | 1200  | 1300  | 1400  | 1500  | 1600  | 1700  | 1800  | 1900  | 2000  | 2100  | 2200  | 2300  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |   |   |
|-----------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---|---|
| KHTC            | BLK1 | -95   | -95   | -95   | -91   | -91   | -93   | -92   | -93   | -89   | -90   | -91   | -93   | -90   | -91   | -91   | -87   | -88   | -88   | -89   | -92   | -93   | -96   | -132  | -134  | -133  | -135  | -137  | -136  | -135  | -139  | -139  | -140  | -136  | -136  | -134  | -132  | -135  | -135  | -136  | -134  | -133  | -132  | -133  | -134  | -133  | -133  | -132  | -133  |   |   |
| PCUF            | CUFG | 22    | 21    | 21    | 22    | 23    | 22    | 23    | 22    | 23    | 23    | 23    | 23    | 24    | 24    | 23    | 24    | 23    | 23    | 21    | 21    | 22    | 21    | 20    | 20    | 20    | 19    | 20    | 20    | 20    | 20    | 21    | 21    | 21    | 21    | 21    | 21    | 21    | 21    | 22    | 24    | 23    | 25    | 22    | 23    | 24    | 23    |       |       |   |   |
| PCUF            | CUFK | 4     | 2     | 1     | 5     | 4     | 4     | 2     | 0     | 12    | 29    | 28    | 28    | 29    | 29    | 28    | 29    | 29    | 28    | 26    | 25    | 26    | 26    | 27    | 25    | 25    | 25    | 26    | 24    | 25    | 28    | 27    | 31    | 29    | 30    | 29    | 29    | 30    | 29    | 29    | 30    | 29    | 30    | 28    | 27    | 30    | 28    | 29    |       |   |   |
| PFTZ            | PFTZ | 15    | 14    | 14    | 14    | 15    | 14    | 14    | 14    | 14    | 14    | 14    | 14    | 14    | 14    | 14    | 15    | 14    | 14    | 14    | 14    | 14    | 15    | 15    | 15    | 15    | 15    | 14    | 14    | 14    | 14    | 14    | 14    | 14    | 14    | 14    | 14    | 14    | 14    | 14    | 14    | 14    | 14    | 14    | 15    | 15    | 15    | 15    |       |   |   |
| Total Co-Gen    |      | -62   | -68   | -59   | -50   | -49   | -53   | -53   | -57   | -40   | -31   | -27   | -28   | -24   | -25   | -24   | -23   | -22   | -22   | -38   | -31   | -33   | -48   | -69   | -70   | -86   | -73   | -76   | -86   | -77   | -81   | -85   | -85   | -86   | -74   | -78   | -72   | -89   | -73   | -78   | -79   | -80   | -74   | -78   | -85   | -79   | -74   | -73   | -84   |   |   |
| Total Gen       |      | 14140 | 13943 | 13666 | 13385 | 13057 | 12933 | 12667 | 12488 | 12426 | 12351 | 12244 | 12247 | 12425 | 12463 | 12263 | 11780 | 11693 | 11914 | 12199 | 12401 | 12743 | 12959 | 13134 | 13129 | 13103 | 13259 | 13159 | 13282 | 13359 | 13567 | 13597 | 13976 | 14243 | 14272 | 14013 | 13974 | 14028 | 14202 | 15102 | 15499 | 15556 | 15453 | 15443 | 15261 | 15169 | 15033 | 14688 | 14492 |   |   |
| TIE-EGAT        |      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0 |   |
| TIE-HVDC        |      | -28   | -29   | -29   | -28   | -28   | -30   | -29   | -29   | -29   | -28   | -28   | -29   | -29   | -30   | -30   | -31   | -29   | -31   | -28   | -31   | -29   | -29   | -31   | -30   | -30   | -29   | -29   | -28   | -28   | -28   | -28   | -31   | -28   | -28   | -28   | -29   | -28   | -28   | -29   | -28   | -29   | -31   | -28   | -29   | -29   | -30   | -31   |       |   |   |
| TIE-PLTG        |      | -36   | 9     | -26   | -24   | -31   | -21   | -23   | 20    | 4     | -13   | -12   | -16   | -20   | -25   | 4     | -8    | -11   | -13   | -28   | -30   | -9    | -36   | 4     | 10    | 12    | 17    | 13    | -3    | -14   | -12   | -58   | 18    | 44    | 33    | -2    | -21   | -11   | -15   | -13   | -10   | -15   | -46   | -22   | -47   | -8    | -11   | 18    | 20    |   |   |
| Interconnection |      | -65   | -20   | -56   | -52   | -59   | -52   | -9    | -25   | -42   | -41   | -44   | -49   | -55   | -26   | -38   | -41   | -42   | -59   | -58   | -39   | -65   | -25   | -21   | -18   | -13   | -15   | -32   | -43   | -40   | -86   | -10   | 16    | 5     | -32   | -48   | -40   | -43   | -42   | -38   | -43   | -75   | -53   | -75   | -37   | -40   | -12   | -11   |       |   |   |
| System Total    |      | 14205 | 13963 | 13722 | 13437 | 13116 | 12985 | 12719 | 12497 | 12451 | 12393 | 12285 | 12291 | 12474 | 12518 | 12289 | 11818 | 11734 | 11956 | 12258 | 12459 | 12782 | 13024 | 13159 | 13150 | 13121 | 13272 | 13174 | 13314 | 13402 | 13607 | 13683 | 13986 | 14227 | 14267 | 14045 | 14022 | 14068 | 14245 | 15144 | 15537 | 15599 | 15528 | 15496 | 15336 | 15206 | 15073 | 14700 | 14503 |   |   |
| SRev ST-Coal    |      | 204   | 352   | 386   | 347   | 399   | 407   | 396   | 396   | 408   | 413   | 395   | 407   | 446   | 491   | 487   | 664   | 661   | 670   | 595   | 589   | 663   | 664   | 665   | 661   | 672   | 657   | 673   | 653   | 657   | 655   | 638   | 654   | 550   | 432   | 441   | 624   | 610   | 597   | 269   | 175   | 144   | 163   | 150   | 208   | 192   | 178   | 272   | 147   |   |   |
| SRev OCGT-Gas   |      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0 |   |
| SRev CCGT-Gas   |      | 1314  | 683   | 793   | 1000  | 1228  | 1335  | 1588  | 1676  | 1748  | 1842  | 1966  | 1938  | 1711  | 1617  | 1597  | 1672  | 1589  | 1374  | 1246  | 1129  | 837   | 705   | 641   | 730   | 692   | 670   | 748   | 531   | 420   | 242   | 277   | 142   | 195   | 159   | 634   | 471   | 492   | 428   | 174   | 364   | 375   | 171   | 175   | 196   | 257   | 241   | 315   | 433   |   |   |
| SRev ST-Gas     |      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0 | 0 |
| SRev Co-Gen     |      | 0     | -1    | 0     | 0     | 0     | 0     | -1    | 0     | 0     | 2     | 1     | 1     | 0     | 0     | 1     | 0     | 0     | 0     | 1     | 0     | 0     | 1     | 0     | 1     | 0     | 0     | 1     | 1     | 0     | 0     | 2     | -1    | 0     | 0     | 1     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0 |   |
| Syncon          |      | 1079  | 1079  | 1079  | 1079  | 1079  | 1079  | 1230  | 1079  | 1230  | 1230  | 1079  | 1230  | 1230  | 1230  | 1230  | 1230  | 1230  | 1230  | 1079  | 1230  | 1079  | 1230  | 1230  | 1079  | 1230  | 1230  | 1230  | 1230  | 1230  | 1043  | 1079  | 1230  | 1043  | 892   | 1230  | 1043  | 892   | 1079  | 1079  | 1079  | 705   | 604   | 705   | 741   | 1079  |       |       |       |   |   |
| Hydro           |      | 132   | 95    | 135   | 266   | 260   | 265   | 136   | 272   | 122   | 104   | 266   | 119   | 135   | 134   | 124   | 125   | 124   | 123   | 123   | 120   | 244   | 110   | 125   | 246   | 111   | 75    | 244   | 86    | 81    | 63    | 57    | 77    | 185   | 194   | 100   | 131   | 320   | 95    | 200   | 190   | 94    | 347   | 212   | 262   | 396   | 466   | 738   | 468   |   |   |
| S.Reserve Total |      | 2729  | 2208  | 2393  | 2692  | 2966  | 3086  | 3349  | 3423  | 3508  | 3591  | 3707  | 3695  | 3522  | 3472  | 3439  | 3691  | 3604  | 3397  | 3195  | 3068  | 2823  | 2710  | 2669  | 2725  | 2713  | 2640  | 2761  | 2509  | 2388  | 2190  | 2204  | 2102  | 1973  | 1864  | 2406  | 2269  | 2314  | 2350  | 1686  | 1621  | 1692  | 1761  | 1616  | 1372  | 1449  | 1590  | 2066  | 2127  |   |   |