

## Daily System Generation Summary on Thursday

Thursday, October 8, 2020

### Availability at Daily Maximum Demand Hour

|              |           |
|--------------|-----------|
| ST-Coal      | 0 MW      |
| ST-Gas       | 0 MW      |
| ST-Oil       | 0 MW      |
| Hydro        | 2,179 MW  |
| Distillate   | 0 MW      |
| Total TNB    | 2,179 MW  |
| Total IPP    | 15,714 MW |
| Total Co-Gen | 0 MW      |
| Total System | 20,087 MW |

### Generation Mix

| Type                    | MWh            | Percentage      |
|-------------------------|----------------|-----------------|
| Hydro                   | 24,380         | 6.73 %          |
| Gas                     | 29,573         | 8.16 %          |
| <b>Total TNB</b>        | <b>53,953</b>  | <b>14.89 %</b>  |
| ST-Coal                 | 213,075        | 58.79 %         |
| LSS                     | 2,335          | 0.64 %          |
| Gas                     | 93,407         | 25.77 %         |
| <b>Total IPP</b>        | <b>308,817</b> | <b>85.20 %</b>  |
| Co-Gen                  | 627            | 0.17 %          |
| <b>Total Co-Gen</b>     | <b>627</b>     | <b>0.17 %</b>   |
| <b>Total Generation</b> | <b>363,397</b> | <b>100.26 %</b> |
| PLTG                    | 214            | 0.06 %          |
| HVDC                    | 726            | 0.20 %          |
| <b>Interconnection</b>  | <b>940</b>     | <b>0.26 %</b>   |
| <b>Net Energy</b>       | <b>362,457</b> | <b>100.00 %</b> |

### Maximum Demand Record

|                 |             |
|-----------------|-------------|
| Date: 3/10/2020 | 18,808 MW   |
| Date: 3/10/2020 | 394,238 MWH |

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

|                               |               |
|-------------------------------|---------------|
| Daily Maximum Demand Hour at: | 14:30:00 Hour |
| Total Set On Bus              | 18,287 MW     |
| TNB Generation                | 2,936 MW      |
| IPP Generation                | 14,123 MW     |
| Spinning Reserve              | 1,196 MW      |
| Maximum Demand                | 17,087 MW     |
| Net Energy                    | 362,457 MWH   |
| Load Factor                   | 88.39 %       |

### Fuel Cost

|               |                  |
|---------------|------------------|
| Total Cost:   | 52,093,578.25 RM |
| Cost per Unit | 14.34 cents/kWH  |

### Average Spinning Reserve During Peak Hour

| Type         | MW           |
|--------------|--------------|
| GT           | 396          |
| Hydro        | 351          |
| Syncon       | 552          |
| Thermal      | 157          |
| <b>Total</b> | <b>1,456</b> |

### Time Weather Temperature

|           |       |    |
|-----------|-------|----|
| Afternoon | Hot   | 33 |
| Morning   | Sunny | 27 |

### Gas Usage

| Station          | (mmscfd)   |
|------------------|------------|
| GLGR             | 49         |
| PGPS             | 21         |
| SRDG             | 10         |
| TJGS             | 144        |
| <b>Total TNB</b> | <b>224</b> |
| CBPS             | 50         |
| KLPP             | 92         |
| NPRI             | 139        |
| PGLA             | 106        |
| PLPS             | 85         |
| SGB3             | 68         |
| SGRI             | 1          |
| SKSP             | 8          |
| YPKA             | 24         |
| <b>Total IPP</b> | <b>575</b> |
| <b>Total Gas</b> | <b>799</b> |

**Total Gas Required 799**

### 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 | 14213 | 13608 | 13266 | 12873 | 12578 | 12529 | 12900 | 12941 | 13464 | 15258 | 15998 | 16605 | 16419 | 16266 | 16868 | 17017 | 16999 | 16638 | 15693 | 16047 | 16542 | 16293 | 15690 | 15251 |

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Thursday, November 5, 2020 8:29:19 AM

(Ir. Shanmugam Thoppalan)  
Head  
Grid System Operator

# Daily MW Generation on Thursday

| 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 |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| JMAH          | U001 | 693  | 691  | 675  | 691  | 691  | 691  | 694  | 693  | 689  | 692  | 693  | 692  | 689  | 691  | 692  | 693  | 692  | 691  | 692  | 692  | 693  | 693  | 693  | 693  | 694  | 691  | 692  |
| JMAH          | U002 | 695  | 693  | 676  | 694  | 693  | 694  | 696  | 693  | 696  | 693  | 693  | 693  | 693  | 692  | 694  | 694  | 693  | 695  | 693  | 695  | 694  | 692  | 694  | 694  | 694  | 696  | 692  |
| JMHE          | U001 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 154  | 107  | 145  | 135  | 137  | 140  | 139  | 137  | 298  | 298  |
| JMHE          | U002 | 980  | 980  | 980  | 985  | 983  | 982  | 979  | 779  | 789  | 777  | 785  | 779  | 779  | 780  | 778  | 779  | 782  | 969  | 982  | 979  | 977  | 975  | 983  | 978  | 980  | 981  | 977  |
| JMIG          | U001 | 676  | 668  | 671  | 671  | 673  | 669  | 636  | 665  | 671  | 671  | 673  | 672  | 670  | 671  | 670  | 672  | 673  | 671  | 672  | 676  | 673  | 668  | 671  | 672  | 669  | 672  | 669  |
| JMIG          | U002 | 673  | 672  | 681  | 676  | 672  | 672  | 672  | 677  | 672  | 677  | 677  | 671  | 670  | 679  | 668  | 668  | 673  | 672  | 674  | 672  | 673  | 668  | 683  | 670  | 673  | 669  | 672  |
| JMIG          | U004 | 983  | 979  | 979  | 892  | 806  | 789  | 789  | 789  | 788  | 790  | 789  | 790  | 789  | 789  | 789  | 789  | 787  | 825  | 900  | 982  | 981  | 981  | 979  | 979  | 978  | 981  | 978  |
| PKLG          | U004 | 278  | 278  | 281  | 279  | 277  | 275  | 276  | 275  | 277  | 277  | 280  | 277  | 280  | 277  | 281  | 279  | 278  | 278  | 280  | 280  | 278  | 288  | 281  | 279  | 275  | 275  | 278  |
| PKLG          | U005 | 468  | 473  | 465  | 468  | 468  | 467  | 465  | 466  | 466  | 468  | 466  | 467  | 468  | 466  | 466  | 466  | 466  | 466  | 467  | 467  | 467  | 467  | 466  | 466  | 465  | 411  | 458  |
| PKLG          | U006 | 445  | 444  | 445  | 448  | 448  | 446  | 444  | 449  | 452  | 447  | 449  | 450  | 445  | 446  | 451  | 454  | 450  | 450  | 451  | 449  | 449  | 449  | 449  | 449  | 450  | 449  | 448  |
| TBIN          | U001 | 689  | 689  | 689  | 690  | 689  | 690  | 692  | 691  | 693  | 690  | 690  | 690  | 690  | 689  | 689  | 689  | 689  | 690  | 690  | 691  | 689  | 689  | 689  | 690  | 690  | 691  | 687  |
| TBIN          | U002 | 694  | 692  | 691  | 695  | 697  | 692  | 692  | 693  | 693  | 692  | 691  | 694  | 691  | 691  | 691  | 692  | 692  | 692  | 694  | 690  | 693  | 692  | 694  | 691  | 693  | 692  | 689  |
| TBIN          | U003 | 692  | 691  | 687  | 690  | 690  | 691  | 687  | 689  | 690  | 689  | 693  | 691  | 690  | 689  | 687  | 688  | 689  | 689  | 690  | 686  | 691  | 691  | 692  | 689  | 689  | 690  | 687  |
| TBIN          | U004 | 983  | 982  | 984  | 983  | 943  | 856  | 781  | 783  | 782  | 782  | 783  | 783  | 784  | 782  | 783  | 782  | 782  | 841  | 930  | 983  | 982  | 982  | 982  | 981  | 982  | 983  | 983  |
| Total ST-Coal |      | 8949 | 8932 | 8904 | 8862 | 8730 | 8614 | 8500 | 8343 | 8363 | 8346 | 8362 | 8349 | 8342 | 8348 | 8340 | 8337 | 8345 | 8629 | 8813 | 8971 | 8956 | 8953 | 8958 | 8955 | 8958 | 8968 | 8952 |
| Total ST-Oil  |      | 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    |
| Total 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    |
| CBPS          | BLK2 | 354  | 282  | 217  | 220  | 222  | 214  | 219  | 215  | 218  | 223  | 231  | 226  | 223  | 275  | 354  | 351  | 354  | 359  | 364  | 346  | 348  | 352  | 356  | 354  | 362  | 359  | 348  |
| GLGR          | GT01 | 67   | 69   | 68   | 69   | 68   | 68   | 67   | 68   | 70   | 67   | 67   | 66   | 66   | 68   | 67   | 66   | 66   | 81   | 100  | 90   | 69   | 67   | 67   | 72   | 104  | 105  | 103  |
| GLGR          | GT02 | 68   | 68   | 68   | 68   | 69   | 68   | 68   | 68   | 68   | 68   | 67   | 67   | 68   | 68   | 68   | 68   | 68   | 83   | 101  | 90   | 68   | 68   | 67   | 72   | 104  | 103  | 104  |
| GLGR          | ST1C | 72   | 72   | 72   | 72   | 72   | 72   | 72   | 72   | 72   | 72   | 72   | 72   | 72   | 72   | 72   | 72   | 72   | 71   | 91   | 89   | 72   | 71   | 71   | 93   | 94   | 93   | 93   |
| KLPP          | GT13 | 65   | 68   | 69   | 67   | 67   | 65   | 64   | 62   | 67   | 68   | 72   | 68   | 67   | 65   | 61   | 59   | 34   | 52   | 137  | 137  | 133  | 137  | 133  | 112  | 113  | 134  | 131  |
| KLPP          | GT14 | 77   | 79   | 78   | 78   | 78   | 78   | 77   | 78   | 78   | 83   | 78   | 81   | 82   | 77   | 77   | 60   | 62   | 157  | 157  | 156  | 156  | 145  | 148  | 144  | 112  | 116  | 155  |
| KLPP          | GT15 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 39   | 151  | 159  | 158  | 158  | 158  | 159  | 158  | 131  | 131  | 158  | 158  | 162  |
| KLPP          | ST17 | 86   | 84   | 84   | 84   | 84   | 87   | 87   | 84   | 82   | 90   | 90   | 88   | 90   | 89   | 86   | 83   | 0    | 135  | 206  | 203  | 203  | 202  | 202  | 201  | 201  | 186  | 186  |
| NPRI          | BLK1 | 471  | 323  | 321  | 325  | 328  | 320  | 314  | 316  | 325  | 328  | 335  | 328  | 329  | 480  | 464  | 458  | 464  | 476  | 471  | 469  | 466  | 472  | 468  | 481  | 472  | 475  | 475  |
| NPRI          | BLK2 | 321  | 323  | 319  | 325  | 337  | 321  | 313  | 313  | 325  | 518  | 349  | 328  | 515  | 521  | 488  | 480  | 488  | 509  | 500  | 497  | 495  | 503  | 497  | 509  | 502  | 504  | 505  |
| PCGP          | PGRG | 595  | 595  | 598  | 597  | 604  | 593  | 584  | 586  | 435  | 284  | 411  | 602  | 604  | 609  | 588  | 581  | 588  | 601  | 600  | 597  | 591  | 601  | 594  | 613  | 599  | 603  | 604  |
| PGLA          | GT11 | 162  | 162  | 162  | 164  | 164  | 163  | 160  | 160  | 162  | 164  | 166  | 164  | 164  | 166  | 159  | 157  | 180  | 188  | 196  | 197  | 211  | 187  | 212  | 197  | 200  | 202  | 195  |
| PGLA          | GT12 | 166  | 165  | 167  | 167  | 169  | 165  | 163  | 163  | 166  | 167  | 169  | 167  | 167  | 169  | 164  | 162  | 163  | 183  | 193  | 200  | 199  | 212  | 191  | 215  | 201  | 203  | 206  |
| PGLA          | ST10 | 202  | 200  | 202  | 197  | 200  | 200  | 200  | 197  | 197  | 202  | 204  | 202  | 204  | 204  | 200  | 200  | 200  | 205  | 228  | 226  | 235  | 232  | 218  | 237  | 234  | 229  | 232  |
| PGPS          | GT3A | 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    |
| PGPS          | GT3B | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   |
| PGPS          | ST3C | 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    |
| PLPS          | GT11 | 64   | 64   | 63   | 62   | 67   | 63   | 62   | 60   | 62   | 65   | 70   | 65   | 66   | 67   | 63   | 61   | 63   | 115  | 115  | 116  | 126  | 133  | 115  | 145  | 115  | 144  | 134  |
| PLPS          | GT12 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 5    | 125  | 120  | 120  | 120  | 120  | 130  | 137  | 118  | 151  | 119  | 148  | 137  |
| PLPS          | GT13 | 60   | 60   | 60   | 59   | 63   | 60   | 60   | 58   | 60   | 63   | 67   | 64   | 63   | 67   | 60   | 59   | 59   | 111  | 112  | 113  | 123  | 129  | 110  | 143  | 113  | 140  | 129  |
| PLPS          | ST18 | 90   | 88   | 87   | 87   | 87   | 88   | 86   | 85   | 85   | 91   | 93   | 91   | 91   | 94   | 88   | 85   | 143  | 200  | 197  | 199  | 212  | 203  | 197  | 213  | 203  | 212  | 209  |
| SGB3          | GT31 | 110  | 110  | 110  | 110  | 112  | 109  | 109  | 108  | 109  | 113  | 116  | 115  | 115  | 118  | 111  | 111  | 112  | 117  | 117  | 116  | 114  | 141  | 141  | 118  | 110  | 120  | 117  |
| SGB3          | GT32 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 36   | 125  | 122  | 114  | 124  | 122  |
| SGB3          | GT33 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 58   | 75   | 141  | 142  | 128  | 119  | 113  | 123  | 117  | 114  |
| SGB3          | ST34 | 55   | 56   | 56   | 56   | 56   | 56   | 56   | 56   | 58   | 59   | 58   | 58   | 59   | 59   | 57   | 57   | 58   | 58   | 95   | 133  | 145  | 216  | 202  | 208  | 208  | 203  | 203  |
| SGRI          | GT23 | 107  | 74   | 13   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| SGRI          | ST24 | 57   | 52   | 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    |
| SKSP          | BLK1 | 147  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 25   | 320  | 348  | 346  | 297  | 293  | 299  |
| TJGS          | GT1A | 140  | 144  | 142  | 145  | 141  | 142  | 131  | 135  | 144  | 148  | 144  | 143  | 142  | 142  | 134  | 132  | 137  | 202  | 210  | 223  | 212  | 230  | 208  | 229  | 210  | 227  | 218  |
| TJGS          | GT1B | 130  | 129  | 132  | 135  | 130  | 131  | 118  | 120  | 133  | 136  | 133  | 132  | 128  | 126  | 126  | 122  | 126  | 197  | 200  | 209  | 204  | 210  | 193  | 213  | 198  | 211  | 205  |



### Daily MW Generation on Thursday

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