

## Availability at Daily Maximum Demand Hour

|              |           |
|--------------|-----------|
| ST-Coal      | 0 MW      |
| ST-Gas       | 0 MW      |
| ST-Oil       | 0 MW      |
| Hydro        | 1,654 MW  |
| Distillate   | 0 MW      |
| Total TNB    | 1,654 MW  |
| Total IPP    | 17,584 MW |
| Total Co-Gen | 0 MW      |
| Total System | 21,367 MW |

## Generation Mix

| Type                    | MWh            | Percentage      |
|-------------------------|----------------|-----------------|
| Hydro                   | 15,869         | 4.33 %          |
| Gas                     | 30,557         | 8.34 %          |
| <b>Total TNB</b>        | <b>46,426</b>  | <b>12.67 %</b>  |
| ST-Coal                 | 233,589        | 63.77 %         |
| LSS                     | 4,246          | 1.16 %          |
| Gas                     | 82,264         | 22.46 %         |
| <b>Total IPP</b>        | <b>320,099</b> | <b>87.38 %</b>  |
| Co-Gen                  | 955            | 0.26 %          |
| <b>Total Co-Gen</b>     | <b>955</b>     | <b>0.26 %</b>   |
| <b>Total Generation</b> | <b>367,480</b> | <b>100.32 %</b> |
| PLTG                    | 446            | 0.12 %          |
| HVDC                    | 724            | 0.20 %          |
| <b>Interconnection</b>  | <b>1,170</b>   | <b>0.32 %</b>   |
| <b>Net Energy</b>       | <b>366,310</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: | 16:30:00 Hour |
| Total Set On Bus              | 18,822 MW     |
| TNB Generation                | 2,103 MW      |
| IPP Generation                | 15,426 MW     |
| Spinning Reserve              | 1,259 MW      |
| Maximum Demand                | 17,394 MW     |
| Net Energy                    | 366,310 MWH   |
| Load Factor                   | 87.75 %       |

## Fuel Cost

|               |                  |
|---------------|------------------|
| Total Cost:   | 59,423,453.66 RM |
| Cost per Unit | 16.17 cents/kWH  |

## Average Spinning Reserve During Peak Hour

| Type         | MW           |
|--------------|--------------|
| GT           | 790          |
| Hydro        | 307          |
| Syncon       | 178          |
| Thermal      | 198          |
| <b>Total</b> | <b>1,473</b> |

| Time      | Weather | Temperature |
|-----------|---------|-------------|
| Afternoon | Hot     | 36          |
| Morning   | Sunny   | 25          |

## Gas Usage

| Station                   | (mmcsfd)   |
|---------------------------|------------|
| GLGR                      | 43         |
| TJGS                      | 124        |
| <b>Total TNB</b>          | <b>166</b> |
| CBPS                      | 48         |
| KLPP                      | 85         |
| NPRI                      | 159        |
| PGLA                      | 80         |
| PLPS                      | 67         |
| SGB3                      | 26         |
| SKSP                      | 31         |
| <b>Total IPP</b>          | <b>497</b> |
| <b>Total Gas</b>          | <b>664</b> |
| <b>Total Gas Required</b> | <b>664</b> |

## Alternate Fuel Usage

| Station      | (mmcsfd) |
|--------------|----------|
| <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 | 14906 | 14182 | 13727 | 13310 | 12928 | 12695 | 12795 | 12763 | 13156 | 14725 | 15492 | 15979 | 16071 | 16040 | 16751 | 17204 | 17288 | 17023 | 16080 | 15903 | 16958 | 16783 | 16490 | 16277 |

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Wednesday, October 6, 2021 10:47:59 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  |
|-----------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| KRLS            | LSS1 | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| MCLS            | LSS1 | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| SPLS            | LSS1 | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| SSLS            | LSS1 | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| STLS            | LSS1 | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| TBLS            | LSS1 | 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 LSS       |      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| PCUF            | CUFG | 24    | 25    | 25    | 23    | 24    | 24    | 26    | 25    | 24    | 24    | 24    | 22    | 23    | 22    | 21    | 21    | 22    | 23    | 22    | 20    | 22    | 21    | 21    | 23    |
| PCUF            | CUFK | 27    | 25    | 24    | 26    | 25    | 24    | 25    | 27    | 26    | 25    | 26    | 27    | 25    | 25    | 22    | 12    | 15    | 13    | 11    | 12    | 13    | 13    | 13    | 13    |
| Total Co-Gen    |      | 51    | 50    | 49    | 49    | 49    | 48    | 51    | 52    | 50    | 50    | 51    | 49    | 51    | 48    | 38    | 35    | 36    | 35    | 34    | 34    | 35    | 33    | 34    | 36    |
| Total Gen       |      | 14914 | 14569 | 14240 | 13942 | 13744 | 13580 | 13340 | 13093 | 12940 | 12774 | 12730 | 12659 | 12779 | 12818 | 12758 | 12701 | 13142 | 14156 | 14739 | 15260 | 15518 | 15799 | 16050 | 16181 |
| 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     |
| TIE-HVDC        |      | 30    | 29    | 29    | 30    | 30    | 30    | 30    | 31    | 31    | 29    | 29    | 30    | 30    | 30    | 30    | 31    | 29    | 31    | 31    | 29    | 32    | 32    | 31    | 32    |
| TIE-PLTG        |      | -19   | 12    | 32    | 29    | -11   | 52    | 4     | -68   | -14   | -60   | 8     | -19   | -43   | -18   | -31   | -22   | -40   | -29   | -13   | -4    | -1    | -13   | 45    | -8    |
| Interconnection |      | 11    | 42    | 61    | 59    | 20    | 82    | 34    | -37   | 16    | -31   | 38    | 11    | -13   | 12    | -1    | 8     | -10   | 0     | 17    | 26    | 29    | 17    | 75    | 23    |
| System Total    |      | 14906 | 14530 | 14182 | 13886 | 13727 | 13501 | 13310 | 13134 | 12928 | 12809 | 12695 | 12651 | 12795 | 12809 | 12763 | 12697 | 13156 | 14160 | 14725 | 15237 | 15492 | 15785 | 15979 | 16162 |
| SRev ST-Coal    |      | 443   | 606   | 653   | 715   | 711   | 703   | 824   | 895   | 901   | 894   | 831   | 718   | 703   | 707   | 715   | 670   | 710   | 644   | 402   | 313   | 348   | 150   | 146   | 150   |
| SRev CCGT-Gas   |      | 681   | 787   | 909   | 822   | 794   | 822   | 892   | 890   | 880   | 939   | 826   | 963   | 916   | 876   | 921   | 979   | 1198  | 1117  | 1343  | 1331  | 1298  | 1272  | 1169  | 1030  |
| SRev LSS        |      | 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 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     |
| 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     |
| SRev Co-Gen     |      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| Syncon          |      | 451   | 300   | 451   | 451   | 451   | 451   | 451   | 451   | 451   | 451   | 451   | 451   | 451   | 451   | 364   | 213   | 238   | 238   | 238   | 238   | 238   | 238   | 0     | 151   |
| Hydro           |      | 99    | 290   | 192   | 143   | 133   | 135   | 190   | 182   | 186   | 204   | 143   | 186   | 133   | 131   | 131   | 189   | 120   | 104   | 238   | 110   | 110   | 111   | 108   | 109   |
| S.Reserve Total |      | 1674  | 1983  | 2205  | 2131  | 2089  | 2111  | 2357  | 2418  | 2418  | 2488  | 2251  | 2318  | 2203  | 2165  | 2218  | 2289  | 2479  | 2229  | 2196  | 1992  | 1994  | 1771  | 1661  | 1527  |
|                 |      | 1674  | 1983  | 2205  | 2131  | 2089  | 2111  | 2357  | 2418  | 2418  | 2488  | 2251  | 2318  | 2203  | 2165  | 2218  | 2289  | 2479  | 2229  | 2196  | 1992  | 1994  | 1771  | 1661  | 1527  |
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|                 |      | 1674  | 1983  | 2205  | 2131  | 2089  | 2111  | 2357  | 2418  | 2418  | 2488  | 2251  | 2318  | 2203  | 2165  | 2218  | 2289  | 2479  | 2229  |       |       |       |       |       |       |