

## Daily System Generation Summary on Saturday

Saturday, January 03, 2015

### Availability at Daily Maximum Demand Hour

|                     |                  |
|---------------------|------------------|
| ST-Coal             | 1,380 MW         |
| ST-Gas              | 0 MW             |
| ST-Oil              | 0 MW             |
| Gas                 | 3,564 MW         |
| Hydro               | 1,887 MW         |
| Distillate          | 0 MW             |
| <b>Total TNB</b>    | <b>6,831 MW</b>  |
| <b>Total IPP</b>    | <b>10,614 MW</b> |
| <b>Total Co-Gen</b> | <b>0 MW</b>      |
| <b>Total System</b> | <b>18,009 MW</b> |

### Generation Mix

| Type                    | MWh            | Percentage      |
|-------------------------|----------------|-----------------|
| ST-Coal                 | 32,053         | 11.70 %         |
| Gas                     | 43,233         | 15.79 %         |
| Hydro                   | 27,678         | 10.11 %         |
| <b>Total TNB</b>        | <b>102,964</b> | <b>37.60 %</b>  |
| ST-Coal                 | 100,118        | 36.56 %         |
| Gas                     | 69,675         | 25.44 %         |
| <b>Total IPP</b>        | <b>169,793</b> | <b>62.00 %</b>  |
| Co-Gen                  | 2,017          | 0.74 %          |
| <b>Total Co-Gen</b>     | <b>2,017</b>   | <b>0.74 %</b>   |
| <b>Total Generation</b> | <b>274,774</b> | <b>100.33 %</b> |
| PLTG                    | 192            | 0.07 %          |
| HVDC                    | 725            | 0.26 %          |
| <b>Interconnection</b>  | <b>917</b>     | <b>0.33 %</b>   |
| <b>Net Energy</b>       | <b>273,857</b> | <b>100.00 %</b> |

### Maximum Demand Record

|                 |             |
|-----------------|-------------|
| Date: 6/11/2014 | 16,901 MW   |
| Date: 6/24/2014 | 355,911 MWH |

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

|                               |               |
|-------------------------------|---------------|
| Daily Maximum Demand Hour at: | 20:00:00 Hour |
| Total Set On Bus              | 13,977 MW     |
| TNB Generation                | 4,967 MW      |
| IPP Generation                | 8,007 MW      |
| Spinning Reserve              | 918 MW        |
| Maximum Demand                | 12,985 MW     |
| Net Energy                    | 273,857 MWH   |
| Load Factor                   | 87.87 %       |

### Fuel Cost

|               |                  |
|---------------|------------------|
| Total Cost:   | 30,990,946.48 RM |
| Cost per Unit | 12.54 cents/kWH  |

### Average Spinning Reserve During Peak Hour

| Type         | MW         |
|--------------|------------|
| GT           | 468        |
| Hydro        | 143        |
| Syncon       | 253        |
| Thermal      | 27         |
| <b>Total</b> | <b>891</b> |

| Time      | Weather | Temperature |
|-----------|---------|-------------|
| Afternoon | Hot     | 30          |
| Morning   | Sunny   | 24          |

### Gas Usage

| Station          | (mmscfd)   |
|------------------|------------|
| GLGR             | 45         |
| PGPS             | 38         |
| SRDG             | 4          |
| TJGS             | 220        |
| <b>Total TNB</b> | <b>306</b> |
| KLPP             | 90         |
| MPSS             | 45         |
| PDPS             | 6          |
| PGLA             | 103        |
| PKLG             | 1          |
| PTEK             | 5          |
| SGRI             | 190        |
| SKSP             | 47         |
| YPGS             | 28         |
| YPKA             | 28         |
| <b>Total IPP</b> | <b>542</b> |

|                           |            |
|---------------------------|------------|
| <b>Total Gas</b>          | <b>849</b> |
| <b>Total Gas Required</b> | <b>849</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 | 11564 | 11169 | 10738 | 10405 | 10147 | 10124 | 10180 | 10029 | 9674  | 10613 | 11308 | 11960 | 11866 | 11653 | 12077 | 12072 | 12107 | 12023 | 11710 | 11920 | 12985 | 12644 | 12313 | 12034 |





### Daily MW Generation on Saturday

| 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  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |     |     |     |     |   |   |   |
|------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-----|-----|---|---|---|
| Total Hydro      |      | 1214  | 1130  | 1130  | 1100  | 1025  | 1026  | 919   | 987   | 983   | 1011  | 982   | 988   | 984   | 981   | 976   | 982  | 997  | 1012  | 1082  | 1054  | 1059  | 1080  | 1185  | 1183  | 1236  | 1175  | 1138  | 1087  | 1085  | 1109  | 1105  | 1106  | 1107  | 1047  | 1016  | 995   | 990   | 991   | 1109  | 1750  | 1662  | 1690  | 1652  | 1655  | 1562  | 1588  | 1161  | 1161  |     |     |     |     |   |   |   |
| Total Distillate |      | 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   | 0   | 0   | 0 |   |   |
| PCUF             | CUFG | 47    | 46    | 46    | 47    | 46    | 48    | 46    | 48    | 47    | 48    | 48    | 48    | 49    | 48    | 48    | 48   | 50   | 49    | 47    | 48    | 48    | 47    | 46    | 44    | 45    | 45    | 47    | 46    | 45    | 46    | 46    | 46    | 45    | 46    | 48    | 47    | 49    | 50    | 47    | 49    | 48    | 48    | 48    | 48    | 47    | 47    | 49    | 50    |     |     |     |     |   |   |   |
| PCUF             | CUFK | 36    | 36    | 36    | 35    | 39    | 37    | 39    | 38    | 40    | 38    | 39    | 39    | 39    | 39    | 38    | 36   | 38   | 38    | 35    | 34    | 34    | 34    | 34    | 35    | 34    | 33    | 35    | 35    | 34    | 35    | 35    | 36    | 37    | 36    | 36    | 37    | 36    | 36    | 37    | 36    | 37    | 36    | 35    | 38    | 37    | 38    | 37    | 37    | 37  |     |     |     |   |   |   |
| Total Co-Gen     |      | 83    | 82    | 82    | 82    | 85    | 85    | 86    | 87    | 86    | 87    | 87    | 88    | 87    | 89    | 86    | 88   | 88   | 86    | 87    | 86    | 83    | 84    | 82    | 80    | 79    | 81    | 80    | 80    | 80    | 80    | 79    | 81    | 80    | 80    | 83    | 82    | 85    | 87    | 83    | 85    | 85    | 84    | 83    | 86    | 84    | 85    | 86    | 87    |     |     |     |     |   |   |   |
| Total Gen        |      | 11606 | 11493 | 11219 | 10999 | 10749 | 10721 | 10426 | 10395 | 10211 | 10197 | 10128 | 10116 | 10176 | 10162 | 10074 | 9762 | 9712 | 10252 | 10640 | 11002 | 11395 | 11662 | 11989 | 12120 | 11991 | 11826 | 11763 | 11937 | 12078 | 12180 | 12115 | 12126 | 12150 | 12068 | 12016 | 11647 | 11678 | 11680 | 11968 | 12857 | 13059 | 12959 | 12700 | 12656 | 12360 | 12397 | 12089 | 11964 |     |     |     |     |   |   |   |
| 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   | 0   | 0   | 0   | 0 | 0 |   |
| TIE-HVDC         |      | 30    | 30    | 30    | 30    | 30    | 30    | 30    | 30    | 30    | 31    | 31    | 30    | 30    | 31    | 31    | 30   | 30   | 31    | 31    | 30    | 30    | 30    | 30    | 30    | 30    | 30    | 30    | 31    | 31    | 30    | 30    | 31    | 31    | 30    | 30    | 31    | 31    | 30    | 30    | 31    | 31    | 30    | 30    | 31    | 31    | 30    | 30    | 30    | 29  | 29  |     |     |   |   |   |
| TIE-PLTG         |      | 12    | 16    | 19    | 8     | -19   | -8    | -9    | 23    | 34    | 3     | -26   | -30   | -34   | -20   | 15    | 35   | 7    | 3     | -4    | 44    | 57    | 25    | -1    | -30   | 95    | 8     | 80    | 15    | -30   | -33   | 13    | 22    | 12    | 0     | -37   | -18   | -63   | -19   | 18    | 2     | 43    | 58    | 26    | 52    | 17    | 12    | 25    | -37   |     |     |     |     |   |   |   |
| Interconnection  |      | 42    | 46    | 50    | 39    | 11    | 22    | 21    | 53    | 64    | 33    | 4     | 1     | -4    | 10    | 45    | 65   | 38   | 33    | 27    | 75    | 87    | 56    | 29    | 1     | 125   | 39    | 110   | 45    | 1     | -2    | 43    | 53    | 43    | 31    | -7    | 12    | -32   | 12    | 48    | 32    | 74    | 89    | 56    | 82    | 47    | 42    | 55    | -8    |     |     |     |     |   |   |   |
| System Total     |      | 11564 | 11447 | 11169 | 10960 | 10758 | 10699 | 10405 | 10342 | 10147 | 10164 | 10124 | 10115 | 10180 | 10152 | 10029 | 9697 | 9674 | 10219 | 10613 | 10927 | 11308 | 11606 | 11960 | 12119 | 11866 | 11787 | 11653 | 11892 | 12077 | 12182 | 12072 | 12073 | 12107 | 12037 | 12023 | 11635 | 11710 | 11668 | 11920 | 12825 | 12985 | 12870 | 12644 | 12574 | 12313 | 12355 | 12034 | 11972 |     |     |     |     |   |   |   |
| SRev ST-Coal     |      | 18    | 0     | 30    | 25    | 73    | 76    | 80    | 206   | 211   | 338   | 327   | 398   | 440   | 431   | 409   | 402  | 449  | 408   | 259   | 24    | 18    | 11    | 18    | -7    | 68    | 20    | 59    | 22    | 15    | 12    | 12    | 13    | 15    | 14    | 18    | 20    | -12   | 20    | 12    | -15   | 35    | 30    | 14    | 29    | 28    | 12    | 16    | 4     |     |     |     |     |   |   |   |
| 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   | 0   | 0   | 0   | 0 | 0 |   |
| SRev CCGT-Gas    |      | 831   | 338   | 555   | 610   | 638   | 555   | 749   | 725   | 901   | 836   | 920   | 871   | 788   | 822   | 967   | 1286 | 1253 | 827   | 796   | 1000  | 625   | 428   | 386   | 370   | 412   | 643   | 706   | 517   | 379   | 304   | 364   | 355   | 329   | 352   | 372   | 717   | 716   | 783   | 482   | 476   | 455   | 617   | 587   | 620   | 642   | 566   | 304   | 397   |     |     |     |     |   |   |   |
| 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   | 0   | 0   | 0 | 0 | 0 |
| SRev Co-Gen      |      | -7    | -6    | -6    | -6    | -9    | -9    | -9    | -10   | -11   | -10   | -11   | -11   | -12   | -11   | -13   | -10  | -12  | -12   | -10   | -11   | -10   | -7    | -8    | -6    | -4    | -3    | -5    | -4    | -4    | -4    | -3    | -5    | -4    | -4    | -7    | -6    | -9    | -11   | -7    | -9    | -9    | -8    | -7    | -10   | -8    | -9    | -10   | -11   |     |     |     |     |   |   |   |
| Syncon           |      | 453   | 453   | 453   | 453   | 453   | 453   | 453   | 453   | 302   | 453   | 453   | 453   | 453   | 453   | 453   | 453  | 453  | 453   | 453   | 302   | 453   | 453   | 453   | 453   | 453   | 453   | 453   | 453   | 453   | 453   | 453   | 453   | 453   | 453   | 453   | 453   | 453   | 453   | 453   | 453   | 453   | 453   | 453   | 453   | 453   | 453   | 453   | 453   | 453 | 453 | 453 | 453 |   |   |   |
| Hydro            |      | 124   | 56    | 56    | 66    | 52    | 51    | 83    | 60    | 64    | 182   | 65    | 60    | 63    | 61    | 66    | 71   | 66   | 74    | 230   | 107   | 102   | 232   | 106   | 106   | 201   | 112   | 124   | 101   | 102   | 229   | 233   | 232   | 230   | 210   | 191   | 62    | 67    | 66    | 173   | 140   | 212   | 216   | 215   | 284   | 267   | 241   | 241   |       |     |     |     |     |   |   |   |
| S.Reserve Total  |      | 1514  | 936   | 1183  | 1243  | 1327  | 1221  | 1451  | 1434  | 1618  | 1648  | 1754  | 1771  | 1732  | 1756  | 1882  | 2202 | 2209 | 1750  | 1577  | 1573  | 1188  | 966   | 955   | 916   | 1130  | 1227  | 1337  | 1089  | 945   | 843   | 1059  | 1048  | 1023  | 1025  | 1027  | 1246  | 1215  | 1311  | 1113  | 695   | 918   | 1159  | 1075  | 1081  | 1096  | 913   | 1004  | 1084  |     |     |     |     |   |   |   |