

### Availability at Daily Maximum Demand Hour

|              |                  |
|--------------|------------------|
| ST-Coal      | 0 MW             |
| ST-Gas       | 0 MW             |
| ST-Oil       | 0 MW             |
| Gas          | 3,289 MW         |
| Hydro        | 2,482 MW         |
| Distillate   | 0 MW             |
| Total TNB    | <u>5,771 MW</u>  |
| Total IPP    | <u>13,812 MW</u> |
| Total Co-Gen | <u>0 MW</u>      |
| Total System | <u>19,583 MW</u> |

### Maximum Demand Record

|                 |             |
|-----------------|-------------|
| Date: 4/20/2016 | 17,788 MW   |
| Date: 4/20/2016 | 372,457 MWH |

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

|                               |               |
|-------------------------------|---------------|
| Daily Maximum Demand Hour at: | 16:00:00 Hour |
| Total Set On Bus              | 16,347 MW     |
| TNB Generation                | 3,442 MW      |
| IPP Generation                | 11,602 MW     |
| Spinning Reserve              | 1,276 MW      |
| Maximum Demand                | 15,145 MW     |
| Net Energy                    | 317,681 MWH   |
| Load Factor                   | 87.40 %       |

### Gas Usage

| Station                   | (mmscfd)   |
|---------------------------|------------|
| CBPS                      | 2          |
| GLGR                      | 49         |
| PAKA                      | 47         |
| PGPS                      | 39         |
| SRDG                      | 18         |
| TJGS                      | 104        |
| <b>Total TNB</b>          | <b>258</b> |
| CBPS                      | 50         |
| KLPP                      | 94         |
| MPSS                      | 45         |
| NPRI                      | 139        |
| PGLA                      | 110        |
| PLPS                      | 79         |
| PTEK                      | 23         |
| SGB3                      | 47         |
| SGRI                      | 73         |
| <b>Total IPP</b>          | <b>658</b> |
| <b>Total Gas</b>          | <b>916</b> |
| <b>Total Gas Required</b> | <b>916</b> |

### Alternate Fuel Usage

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

### Generation Mix

| Type                    | MWh            | Percentage      |
|-------------------------|----------------|-----------------|
| Gas                     | 32,758         | 10.31 %         |
| Hydro                   | 31,633         | 9.96 %          |
| <b>Total TNB</b>        | <b>64,391</b>  | <b>20.27 %</b>  |
| ST-Coal                 | 164,655        | 51.83 %         |
| Gas                     | 86,879         | 27.35 %         |
| <b>Total IPP</b>        | <b>251,534</b> | <b>79.18 %</b>  |
| Co-Gen                  | 630            | 0.20 %          |
| <b>Total Co-Gen</b>     | <b>630</b>     | <b>0.20 %</b>   |
| <b>Total Generation</b> | <b>316,555</b> | <b>99.65 %</b>  |
| PLTG                    | -423           | -0.13 %         |
| HVDC                    | -703           | -0.22 %         |
| <b>Interconnection</b>  | <b>-1,126</b>  | <b>-0.35 %</b>  |
| <b>Net Energy</b>       | <b>317,681</b> | <b>100.00 %</b> |

### Fuel Cost

|               |                  |
|---------------|------------------|
| Total Cost:   | 48,219,050.20 RM |
| Cost per Unit | 16.92 cents/kWH  |

### Average Spinning Reserve During Peak Hour

| Type         | MW           |
|--------------|--------------|
| GT           | 563          |
| Hydro        | 308          |
| Syncon       | 421          |
| Thermal      | 169          |
| <b>Total</b> | <b>1,461</b> |

### Time Weather Temperature

| Time      | Weather | Temperature |
|-----------|---------|-------------|
| Afternoon | Hot     | 25          |
| Morning   | Sunny   | 26          |

### 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 | 12149 | 11615 | 11317 | 11018 | 10873 | 10699 | 11253 | 11472 | 11865 | 13377 | 14024 | 14696 | 14694 | 14410 | 14754 | 15114 | 15145 | 14752 | 13834 | 13810 | 14683 | 14434 | 13754 | 13203 |

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Thursday, January 26, 2017 8:40:08 AM

(Gurcharan Singh)  
Pengurus Besar Kanan  
Jabatan Sistem Operasi





### Daily MW Generation on Wednesday

| 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  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |     |     |   |
|------------------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|---|
| UJLI             | HY02     | 72    | 69    | -1    | -1    | -1    | -1    | -1    | -1    | -1    | -1    | -1    | 120   | 147   | 151   | 93    | 89    | 89    | 95    | 93    | 152   | 150   | 89    | 95    | 83    | 96    | 90    | 123   | 121   | 120   | 125   | 113   | 117   | 115   | 112   | 120   | 122   | 126   | 150   | 150   | 95    | 81    | 90    | 97    | -1    | -1    |       |       |       |     |     |   |
| UPIA             | HY01     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4   |     |   |
| UPIA             | HY02     | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5   | 5   | 5 |
| Total Hydro      |          | 1360  | 1353  | 1145  | 1047  | 831   | 822   | 824   | 808   | 813   | 815   | 858   | 860   | 888   | 1186  | 1200  | 1211  | 1054  | 1079  | 1244  | 1265  | 1553  | 1556  | 1951  | 1765  | 1664  | 1686  | 1636  | 1680  | 1645  | 1756  | 1806  | 1798  | 1746  | 1574  | 1340  | 1210  | 1208  | 1219  | 1224  | 1489  | 1690  | 1591  | 1348  | 1311  | 1321  | 1273  | 1162  | 1180  |     |     |   |
| 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 |
| PCUF             | CUFG     | 0     | 1     | 1     | 2     | 2     | 3     | 1     | 1     | 1     | 2     | 1     | 1     | 2     | 2     | 2     | 1     | 0     | 1     | 1     | 0     | -1    | 0     | -1    | -1    | -1    | 0     | 0     | -1    | 0     | 1     | 1     | 0     | 0     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 0     | 0     | 0     | 0     | 2     | 0     | 2     | 0     | 1   |     |   |
| PCUF             | CUFK     | 31    | 24    | 24    | 25    | 25    | 25    | 24    | 26    | 26    | 26    | 25    | 26    | 26    | 26    | 26    | 25    | 25    | 26    | 25    | 26    | 26    | 25    | 26    | 27    | 26    | 25    | 26    | 25    | 25    | 25    | 25    | 24    | 26    | 25    | 25    | 25    | 25    | 25    | 26    | 26    | 26    | 26    | 25    | 24    | 25    | 25    | 25    | 25    |     |     |   |
| Total Co-Gen     |          | 31    | 25    | 25    | 27    | 27    | 28    | 25    | 27    | 27    | 28    | 26    | 26    | 28    | 28    | 27    | 28    | 26    | 26    | 27    | 25    | 24    | 26    | 24    | 25    | 26    | 26    | 25    | 26    | 24    | 25    | 26    | 27    | 25    | 24    | 27    | 27    | 26    | 27    | 26    | 27    | 26    | 26    | 26    | 26    | 25    | 26    | 25    | 27    | 26  |     |   |
| Total Gen        |          | 12132 | 11745 | 11579 | 11300 | 11216 | 11058 | 10990 | 10834 | 10815 | 10764 | 10682 | 10819 | 11124 | 11619 | 11499 | 11641 | 11804 | 12639 | 13295 | 13641 | 13949 | 14339 | 14576 | 14817 | 14684 | 14448 | 14377 | 14518 | 14720 | 15017 | 15063 | 15094 | 15071 | 14981 | 14746 | 14229 | 13852 | 13711 | 13757 | 14538 | 14664 | 14609 | 14361 | 14157 | 13784 | 13598 | 13154 | 12897 |     |     |   |
| 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   |   |
| TIE-HVDC         |          | -29   | -29   | -29   | -30   | -30   | -29   | -29   | -29   | -29   | -29   | -29   | -29   | -29   | -29   | -29   | -30   | -30   | -30   | -29   | -29   | -29   | -29   | -29   | -29   | -29   | -29   | -29   | -29   | -29   | -29   | -30   | -30   | -29   | -29   | -29   | -29   | -29   | -29   | -29   | -29   | -29   | -29   | -29   | -30   | -30   | -29   | -29   | -29   |     |     |   |
| TIE-PLTG         |          | 12    | -1    | -7    | -33   | -71   | 4     | 1     | 21    | -29   | 6     | 12    | 1     | -100  | -18   | 56    | -2    | -31   | -37   | -52   | -63   | -45   | -31   | -90   | -28   | 19    | -32   | -4    | -70   | -5    | -50   | -22   | 28    | -44   | 18    | 23    | 14    | 48    | -32   | -25   | -48   | 11    | -34   | -44   | 8     | 60    | -80   | -20   | -40   |     |     |   |
| Interconnection  |          | -17   | -30   | -36   | -63   | -101  | -25   | -28   | -9    | -58   | -23   | -17   | -28   | -129  | -47   | 27    | -32   | -61   | -67   | -82   | -93   | -75   | -61   | -120  | -57   | -10   | -61   | -33   | -100  | -34   | -79   | -51   | 0     | -74   | -11   | -6    | -16   | 18    | -60   | -53   | -77   | -19   | -63   | -73   | -22   | 30    | -109  | -49   | -70   |     |     |   |
| System Total     |          | 12149 | 11775 | 11615 | 11363 | 11317 | 11083 | 11018 | 10843 | 10873 | 10787 | 10699 | 10847 | 11253 | 11666 | 11472 | 11673 | 11865 | 12706 | 13377 | 13734 | 14024 | 14400 | 14696 | 14874 | 14694 | 14509 | 14410 | 14618 | 14754 | 15096 | 15114 | 15094 | 15145 | 14992 | 14752 | 14245 | 13834 | 13771 | 13810 | 14615 | 14683 | 14672 | 14434 | 14179 | 13754 | 13707 | 13203 | 12967 |     |     |   |
| SR               | ST-Coal  | 214   | 250   | 267   | 216   | 256   | 183   | 180   | 364   | 421   | 404   | 506   | 476   | 470   | 481   | 506   | 482   | 499   | 359   | 286   | 96    | 162   | 149   | 172   | 152   | 162   | 156   | 166   | 167   | 166   | 171   | 163   | 158   | 157   | 162   | 166   | 197   | 152   | 186   | 165   | 150   | 177   | 215   | 169   | 176   | 154   | 166   | 167   | 160   |     |     |   |
| SR               | OCGT-Gas | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 71    | 17    | 55    | 128   | 130   | 81    | 106   | 59    | 50    | 115   | 18    | 73    | 99    | 127   | 88    | 83    | 81    | 19    | 48    | 46    | 116   | 0     | 0     | 0     | 0     | 0     | 0     | 0   |     |   |
| SR               | CCGT-Gas | 1910  | 2216  | 2010  | 2006  | 1817  | 2046  | 2116  | 2186  | 2133  | 2114  | 2095  | 1992  | 1726  | 1516  | 1626  | 1521  | 1091  | 830   | 694   | 605   | 718   | 343   | 215   | 453   | 552   | 744   | 839   | 848   | 678   | 592   | 614   | 624   | 511   | 367   | 337   | 401   | 689   | 841   | 834   | 434   | 447   | 434   | 450   | 571   | 633   | 690   | 1011  | 818   |     |     |   |
| SR               | 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   |   |
| SR               | Co-Gen   | -10   | -4    | -4    | -6    | -6    | -7    | -4    | -6    | -6    | -7    | -5    | -5    | -7    | -7    | -6    | -7    | -5    | -5    | -6    | -6    | -4    | -3    | -5    | -3    | -4    | -5    | -5    | -4    | -5    | -3    | -4    | -5    | -6    | -4    | -3    | -6    | -6    | -5    | -6    | -5    | -5    | -5    | -5    | -5    | -4    | -5    | -4    | -6    | -5  |     |   |
| Syncon           |          | 299   | 299   | 673   | 824   | 975   | 975   | 975   | 975   | 975   | 975   | 975   | 975   | 727   | 727   | 727   | 878   | 878   | 576   | 576   | 425   | 425   | 173   | 299   | 425   | 425   | 425   | 425   | 425   | 425   | 425   | 425   | 425   | 425   | 425   | 425   | 425   | 425   | 425   | 425   | 425   | 425   | 425   | 425   | 425   | 425   | 425   | 425   | 425   | 425 | 425 |   |
| Hydro            |          | 329   | 336   | 170   | 117   | 32    | 41    | 39    | 55    | 50    | 48    | 44    | 42    | 14    | 89    | 75    | 64    | 220   | 235   | 365   | 501   | 364   | 361   | 218   | 278   | 253   | 231   | 281   | 237   | 272   | 161   | 111   | 119   | 171   | 343   | 327   | 270   | 272   | 261   | 256   | 353   | 202   | 326   | 469   | 537   | 477   | 425   | 349   | 331   |     |     |   |
| S.Reserve Total  |          | 2742  | 3097  | 3116  | 3157  | 3074  | 3238  | 3306  | 3574  | 3573  | 3534  | 3615  | 3480  | 3178  | 2806  | 2928  | 2787  | 2683  | 2297  | 1915  | 1772  | 1665  | 1275  | 844   | 1196  | 1443  | 1679  | 1836  | 1754  | 1642  | 1405  | 1359  | 1436  | 1276  | 1366  | 1351  | 1601  | 1807  | 1978  | 1942  | 1376  | 1294  | 1441  | 1624  | 1705  | 1684  | 1702  | 2133  | 1916  |     |     |   |