

GRID SYSTEM OPERATION SUMMARY (SABAH)

| | FORECAST | ACTUAL | VARIANCE |
|--|-----------------|---------------|-----------------|
| Maximum Demand (21st NOV' 2012) | 780 MW | 771 MW | -1.12% |
| Maximum Energy (21st NOV' 2012) | 15.5 MW | 14.7 GWh | -5.16% |
| Maximum Demand (record high 28/06/11) | 800 MW | 830 MW | 3.76% |

Prepared by:

Electricity Market Operations

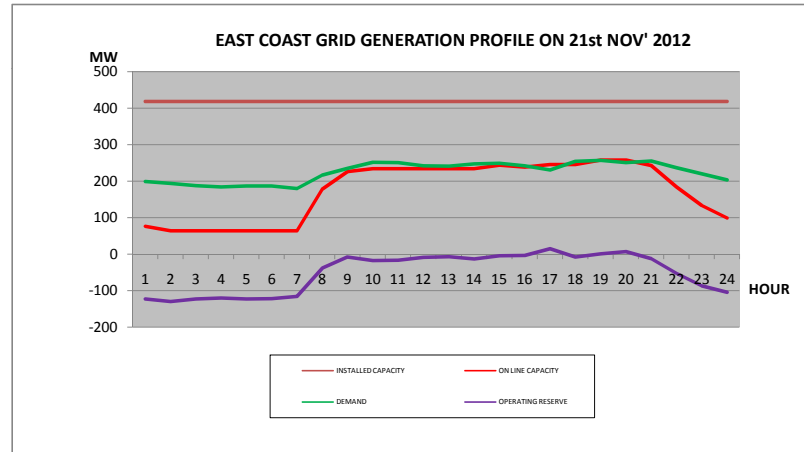
Electricity Supply & Market Regulations Dept.

Energy Commission Malaysia

29-Nov-12

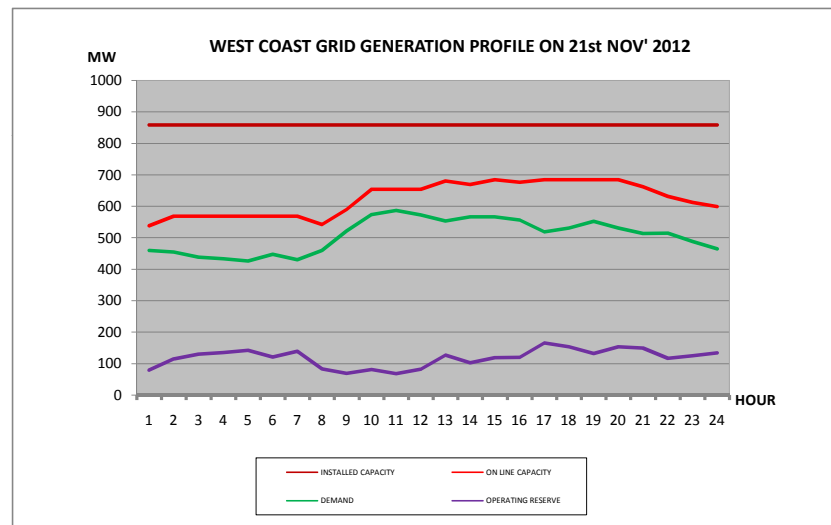
| EAST COAST GRID | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|-------|---------|---------|---------|---------|---------|---------|---------|---------|-------|---------|
| INSTALLED CAPACITY | | 417.9 | 417.9 | 417.9 | 417.9 | 417.9 | 417.9 | 417.9 | 417.9 | 417.9 | 417.9 | 417.9 | 417.9 | 417.9 | 417.9 | 417.9 | 417.9 | 417.9 | 417.9 | 417.9 | 417.9 | 417.9 | 417.9 |
| ON LINE CAPACITY | | 76 | 64 | 64 | 64 | 64 | 64 | 178 | 226.5 | 233.8 | 233.8 | 233.8 | 233.8 | 233.8 | 233.8 | 243.8 | 238.8 | 245.8 | 245.8 | 257.8 | 257.8 | 242.8 | 184 |
| DEMAND | | 198.84 | 194.07 | 187.44 | 184.3 | 187.34 | 186.61 | 179.98 | 216.75 | 235.15 | 251.57 | 250.79 | 242.5 | 241.16 | 247.4 | 248.97 | 242.35 | 231.26 | 254.23 | 257.14 | 250.88 | 255.7 | 237.29 |
| OPERATING RESERVE | | -122.84 | -130.07 | -123.44 | -120.3 | -123.34 | -122.61 | -115.98 | -38.75 | -8.65 | -17.77 | -16.99 | -8.7 | -7.36 | -13.6 | -5.17 | -3.55 | 14.54 | -8.43 | 0.66 | 6.92 | -12.9 | -53.29 |
| East Cost | | 9353.86 | 7999.84 | 8066.5 | 8086.82 | 8034.98 | 8153.37 | 8242.22 | 18904.5 | 24445.4 | 25320 | 25119.4 | 25343 | 25919.7 | 27001.1 | 27747.4 | 27636.2 | 27073.2 | 28833.1 | 28126.7 | 28294.1 | 28048 | 20690.3 |

EAST COAST GRID OPERATION



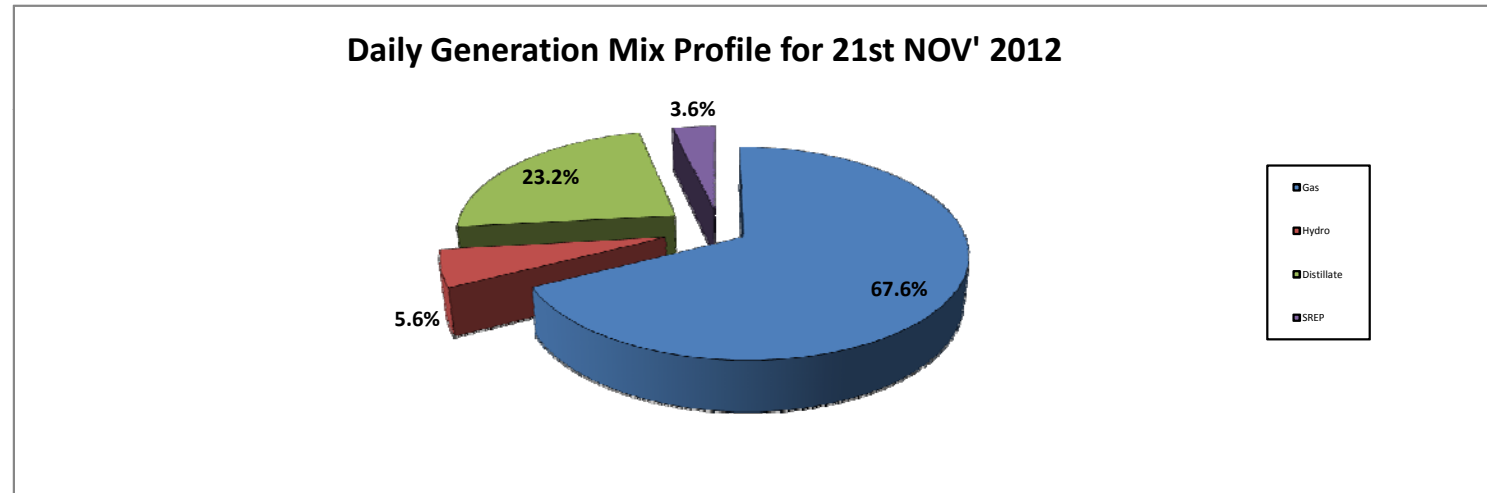
| WEST COAST GRID | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | | <u>1</u> | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u> | <u>7</u> | <u>8</u> | <u>9</u> | <u>10</u> | <u>11</u> | <u>12</u> | <u>13</u> | <u>14</u> | <u>15</u> | <u>16</u> | <u>17</u> | <u>18</u> | <u>19</u> | <u>20</u> | <u>21</u> | <u>22</u> | <u>23</u> | <u>24</u> |
| INSTALLED CAPACITY | | 858.5 | 858.5 | 858.5 | 858.5 | 858.5 | 858.5 | 858.5 | 858.5 | 858.5 | 858.5 | 858.5 | 858.5 | 858.5 | 858.5 | 858.5 | 858.5 | 858.5 | 858.5 | 858.5 | 858.5 | 858.5 | 858.5 | 858.5 | |
| ON LINE CAPACITY | | 538 | 568 | 568 | 568 | 568 | 568 | 568 | 542.5 | 590 | 654 | 654 | 654 | 679.5 | 668.5 | 684 | 675.5 | 684 | 684 | 684 | 684 | 662 | 631 | 612 | 599 |
| DEMAND | | 459.4 | 454 | 438.4 | 432.7 | 425.7 | 447.3 | 429.4 | 459.4 | 521.8 | 573.7 | 586.5 | 572.7 | 553.3 | 566.4 | 566 | 556.2 | 518.6 | 530.6 | 551.8 | 530.7 | 513.4 | 514.3 | 487.9 | 464.8 |
| OPERATING RESERVE | | 78.6 | 114 | 129.6 | 135.3 | 142.3 | 120.7 | 138.6 | 83.1 | 68.2 | 80.3 | 67.5 | 81.3 | 126.2 | 102.1 | 118 | 119.3 | 165.4 | 153.4 | 132.2 | 153.3 | 148.6 | 116.7 | 124.1 | 134.2 |
| West Cost | | 35952.7 | 36244.9 | 35466.1 | 35048.3 | 34438.6 | 35554.7 | 34677.4 | 35474 | 42629.7 | 48425.9 | 49243.9 | 48797.8 | 47845 | 48394.8 | 48782.9 | 47686.5 | 45233.7 | 46646.3 | 47260.9 | 46115.8 | 44140.5 | 42915.8 | 39805.2 | 37444.8 |

WEST COAST GRID OPERATION



Generation Mix Profile for 21st November 2012

| | |
|------------|------------|
| Gas | 10,353 MWh |
| Hydro | 864 MWh |
| Distillate | 3,555 MWh |
| SREP | 553 MWh |



| | DISTILLATE | GAS | HYDRO | BIOMASS |
|--------------|---------------------|----------------------|-------------------|-------------------|
| SESB | 1,543.90 MWh | 1,113.70 MWh | 756.00 MWh | - MWh |
| IPP | 2,011.00 MWh | 9,238.90 MWh | 107.70 MWh | - MWh |
| SREP | - MWh | - MWh | - MWh | 552.50 MWh |
| TOTAL | 3,554.90 MWh | 10,352.60 MWh | 863.70 MWh | 552.50 MWh |

| | DISTILLATE | GAS | HYDRO | BIOMASS |
|--------------|-------------|-------------|-------------|-------------|
| SESB | 10% | 7% | 5% | 0% |
| IPP | 13% | 60% | 1% | 0% |
| SREP | 0% | 0% | 0% | 4% |
| TOTAL | 100% | 100% | 100% | 100% |

TOTALLY 15,323.70

| | |
|--------------|------|
| DIST (IPP) | 13% |
| DIST (SESB) | 10% |
| SREP | 4% |
| GAS (SESB) | 7% |
| GAS (IPP) | 60% |
| HYDRO (SESB) | 5% |
| HYDRO (IPP) | 1% |
| total | 100% |

