

**GRID SYSTEM OPERATION SUMMARY (SABAH)**

|  | <b>FORECAST</b> | <b>ACTUAL</b> | <b>VARIANCE</b> |
|--|-----------------|---------------|-----------------|
| <b>Maximum Demand (19th JAN' 2012)</b>       | 805 MW          | 790 MW        | -1.86%          |
| <b>Maximum Daily Energy (19th JAN 2012)</b>  | 16.1 GWh        | 15.3 GWh      | -4.97%          |
| <b>Maximum Demand (record high 28/06/11)</b> | 800 MW          | 830 MW        | 3.76%           |

Prepared by:

Electricity Market Operations

Electricity Supply & Market Regulations Dept.

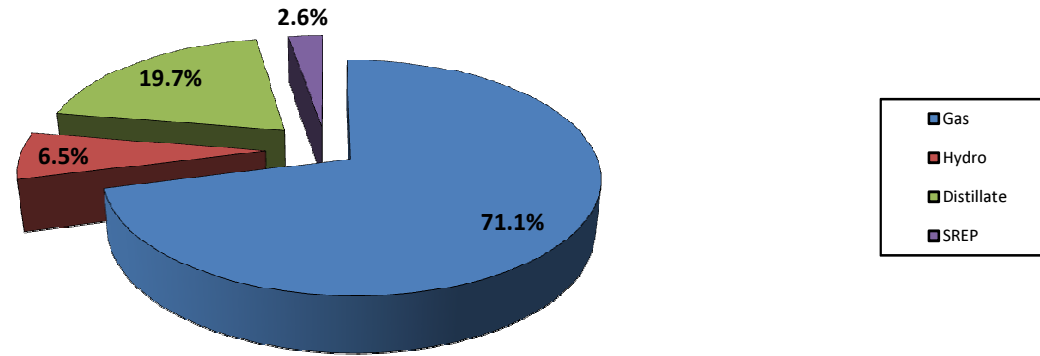
Energy Commission Malaysia

20-Jan-12

**Generation Mix Profile for 19th January 2011**

|            |            |
|------------|------------|
| Gas        | 11,187 MWh |
| Hydro      | 1,030 MWh  |
| Distillate | 3,100 MWh  |
| SREP       | 414 MWh    |

**Daily Generation Mix Profile for 19th January 2012**

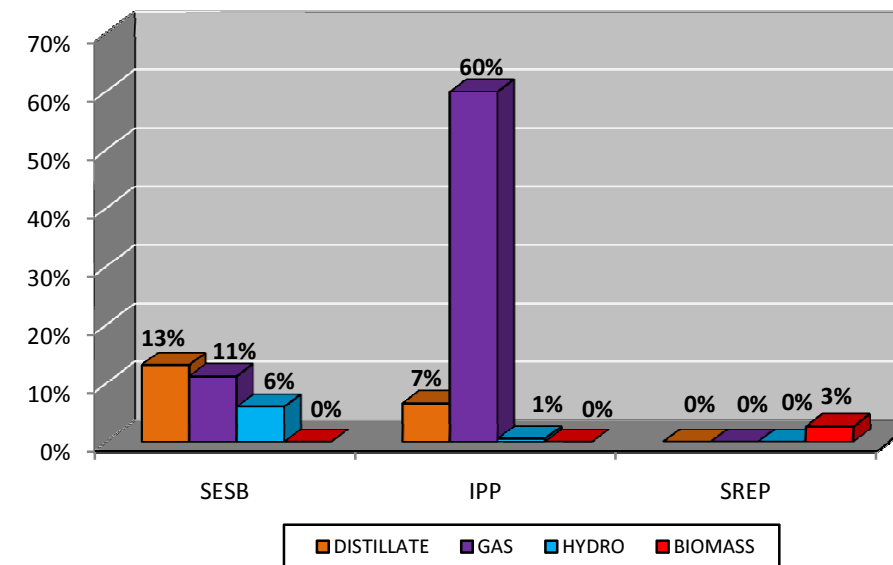


|              | DISTILLATE          | GAS                  | HYDRO               | BIOMASS           |
|--------------|---------------------|----------------------|---------------------|-------------------|
| SESB         | 2,058.20 MWh        | 1,759.40 MWh         | 946.00 MWh          | - MWh             |
| IPP          | 1,042.10 MWh        | 9,427.20 MWh         | 84.00 MWh           | - MWh             |
| SREP         | - MWh               | - MWh                | - MWh               | 414.30 MWh        |
| <b>TOTAL</b> | <b>3,100.30 MWh</b> | <b>11,186.60 MWh</b> | <b>1,030.00 MWh</b> | <b>414.30 MWh</b> |

|                | DISTILLATE  | GAS         | HYDRO       | BIOMASS     |
|----------------|-------------|-------------|-------------|-------------|
| SESB           | 13%         | 11%         | 6%          | 0%          |
| IPP            | 7%          | 60%         | 1%          | 0%          |
| SREP           | 0%          | 0%          | 0%          | 3%          |
| <b>TOTAL</b>   | <b>100%</b> | <b>100%</b> | <b>100%</b> | <b>100%</b> |
| <b>TOTALLY</b> | 15,731.20   |             |             |             |

|              |      |
|--------------|------|
| DIST (IPP)   | 7%   |
| DIST (SESB)  | 13%  |
| SREP         | 3%   |
| GAS (SESB)   | 11%  |
| GAS (IPP)    | 60%  |
| HYDRO (SESB) | 6%   |
| HYDRO (IPP)  | 1%   |
| total        | 100% |

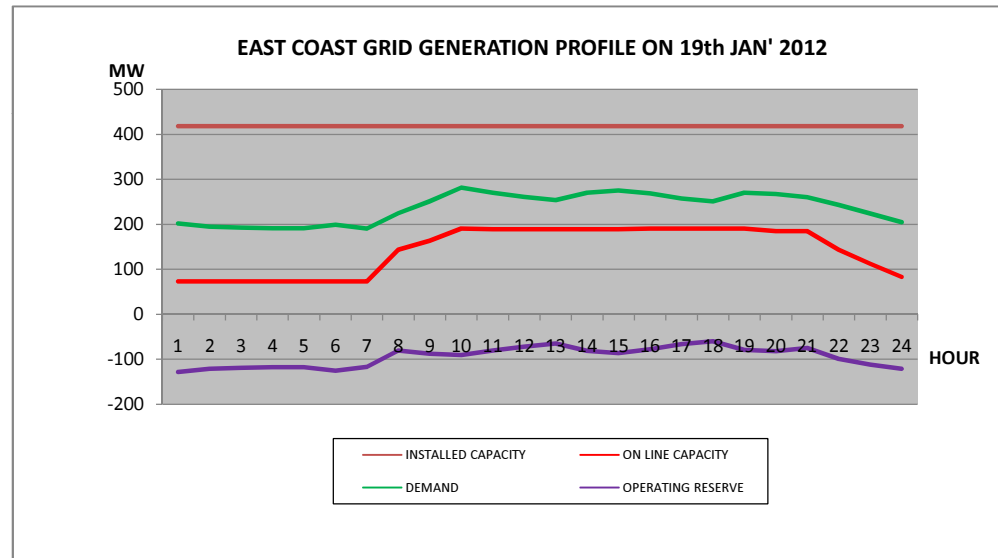
**GENERATION MIX SESB-IPP-SREP 19th JAN' 2012**



**EAST COAST GRID**

|                           |  |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |        |
|---------------------------|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| <b>INSTALLED CAPACITY</b> |  | 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   | 417.9   |         |        |
| <b>ON LINE CAPACITY</b>   |  | 73      | 73      | 73      | 73      | 73      | 73      | 73      | 143     | 163.3   | 190.2   | 188.6   | 188.6   | 188.6   | 188.6   | 188.6   | 190.2   | 190.2   | 190.2   | 190.2   | 184.8   | 184.8   | 143     | 112     | 83      |        |
| <b>DEMAND</b>             |  | 201.51  | 194.39  | 192.09  | 190.91  | 190.81  | 198.43  | 189.96  | 223.87  | 250.9   | 281.32  | 269.71  | 260.6   | 253.79  | 269.91  | 274.82  | 268.52  | 256.86  | 250.4   | 269.84  | 267.07  | 260.24  | 242.63  | 223.82  | 204.15  |        |
| <b>OPERATING RESERVE</b>  |  | -128.51 | -121.39 | -119.09 | -117.91 | -117.81 | -125.43 | -116.96 | -80.87  | -87.6   | -91.12  | -81.11  | -72     | -65.19  | -81.31  | -86.22  | -78.32  | -66.66  | -60.2   | -79.64  | -82.27  | -75.44  | -99.63  | -111.82 | -121.15 |        |
| East Cost                 |  | 9365.13 | 8835.04 | 8965.87 | 9484.75 | 9596.53 | 9502.65 | 9516.2  | 15968.8 | 20111.6 | 24557.9 | 23728.4 | 23571.4 | 23092.7 | 23647.9 | 25464.5 | 24715.1 | 23896.1 | 23563.3 | 25318.8 | 24570.7 | 23784.7 | 18494.1 | 14081.5 | 9471.29 | 398441 |

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> |
| <b>INSTALLED CAPACITY</b> |  | 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     | 858.5     |
| <b>ON LINE CAPACITY</b>   |  | 587      | 587      | 587      | 587      | 587      | 587      | 587      | 631      | 678.5    | 704.1     | 715.1     | 715.7     | 715.7     | 715.7     | 715.7     | 704.7     | 704.7     | 704.7     | 704.7     | 700.5     | 678.5     | 639.5     | 617.5     | 609       |
| <b>DEMAND</b>             |  | 340.19   | 315.51   | 311.31   | 304.69   | 317.29   | 330.07   | 311.14   | 374.93   | 440.5    | 480.78    | 494.29    | 488.65    | 482.06    | 508.34    | 514.93    | 495.43    | 464.19    | 435.35    | 484.71    | 473.83    | 463.36    | 432.27    | 407.58    | 373.25    |
| <b>OPERATING RESERVE</b>  |  | 246.81   | 271.49   | 275.69   | 282.31   | 269.71   | 256.93   | 275.86   | 256.07   | 238      | 223.32    | 220.81    | 227.05    | 233.64    | 207.36    | 200.77    | 209.27    | 240.51    | 269.35    | 219.99    | 226.67    | 215.14    | 207.23    | 209.92    | 235.75    |
| West Cost                 |  | 36647    | 35051    | 34260    | 33620    | 34347    | 35835    | 33915    | 37310    | 44522    | 48448     | 49282     | 48990     | 48368     | 50866     | 51007     | 49643     | 47992     | 45322     | 48904     | 47339     | 45875     | 42801     | 40259     | 37956     |

WEST COAST GRID OPERATION

