

MSCP Market Watch

Third Quarter (Jul-Sep) 2012

Issue 25

Table 1: Indicators of Market Performance

| | 2011 Q3 | 2012 Q2 | 2012 Q3 |
|---|------------|------------|------------|
| Price Indicators | | | |
| <i>Energy (\$/MWh)</i> | | | |
| - USEP | 250.72 | 253.19 | 207.49 |
| - WEP | 251.01 | 254.10 | 208.56 |
| - VCHP | 210.66 | 224.48 | 216.46 |
| <i>Ancillary Services (\$/MWh)</i> | | | |
| - Primary Reserve | 0.34 | 0.47 | 0.42 |
| - Secondary Reserve | 3.52 | 2.65 | 1.01 |
| - Contingency Reserve | 32.37 | 16.50 | 4.76 |
| - Regulation | 74.57 | 91.65 | 85.29 |
| HSFO Spot (US\$/barrel) | 102.70 | 106.09 | 104.38 |
| Demand Indicators | | | |
| <i>Forecast Demand (MW)</i> | | | |
| - Average | 5,184 | 5,264 | 5,226 |
| - Peak | 6,289 | 6,356 | 6,386 |
| <i>Metered Energy (MW)</i> | | | |
| - Average | 5,052 | 5,163 | 5,111 |
| - Peak | 6,231 | 6,329 | 6,295 |
| Supply Indicators | | | |
| Average Supply (MW) | 6,661 | 6,895 | 7,106 |
| Supply Cushion (%) | 22.17 | 23.66 | 26.44 |
| <i>Capacity Ratio (%)</i> | | | |
| - CCGT | 76.53 | 73.74 | 73.30 |
| - OCGT | 0.62 | 0.19 | 0.01 |
| - OT | 48.32 | 41.68 | 48.93 |
| - ST | 32.39 | 26.84 | 21.15 |
| <i>Total Outages (MWh Cumulative)</i> | | | |
| - Planned | 1,305,282 | 1,159,790 | 2,026,025 |
| - Unplanned* | 135,114 | 584,321 | 0 |
| - Forced | 46,015 | 38,561 | 24,889 |
| Offers made at and below \$100/MWh (%) | 56.65 | 56.64 | 55.83 |

Market Performance

The Uniform Singapore Energy Price (USEP) decreased 18.05 percent from \$253.19/MWh in Q2 2012 to \$207.49/MWh in Q3 2012. In line with the decline in the USEP, the Wholesale Electricity Price (WEP) also decreased 17.92 percent to \$208.56/MWh in Q3 2012. Meanwhile, the Vesting Contract Hedge price (VCHP) dropped 3.57 percent from \$224.48/MWh in Q2 2012 to \$216.46/MWh in Q3 2012.

Prices for ancillary services also decreased across the board. The largest price decrease was observed for Contingency Reserve, which was down 71.15 percent to \$4.76/MWh in Q3 2012. Fuel cost represented by the High Sulphur Fuel Oil (HSFO) spot price eased 1.61 percent from US\$106.09/barrel in Q2 2012 to US\$104.38/barrel in Q3 2012.

The supply cushion, which measures supply adequacy, strengthened by 2.78 percentage points from 23.66 percent in Q2 2012 to 26.44 percent in Q3 2012. This was due to a lower forecast demand, which dropped 0.72 percent to 5,226MW, and a higher supply, which rose 3.06 percent to 7,106MW. The slowdown in demand in Q3 2012 was reflective of the downturn in economic activity.

The sharp increase in the quantity of planned outages in Q3 2012 is due to the reclassification of unplanned outages to planned outages from 1 June 2012 onwards. The quantity of anticipated outages, which consist of planned and unplanned outages, saw an increase of 16.16 percent. Meanwhile, the quantity of forced outages decreased 35.46 percent in the same quarter.

In Q3 2012, the MSCP made one rule breach determination pertaining to the failure to submit offer variations after multiple forced outages of combined cycle plants on 13 December 2011.

* The category 'Unplanned Outages' was removed from the System Operation Manual with effect from 1 June 2012.

Supply Indicators

Chart 1: Capacity Ratio of Generation Plants

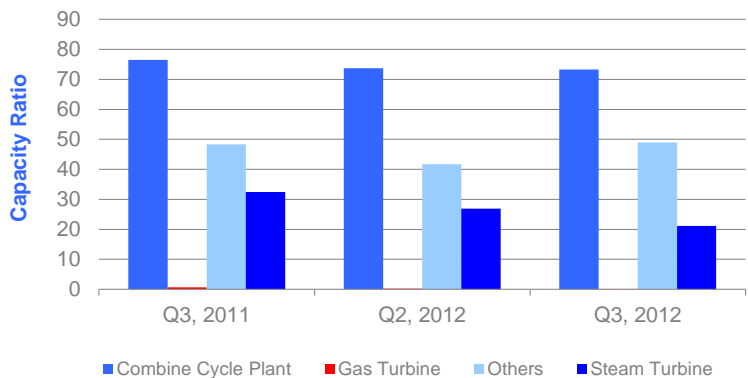


Chart 2: Relationship between USEP and Energy Supply Cushion - Q3 2012

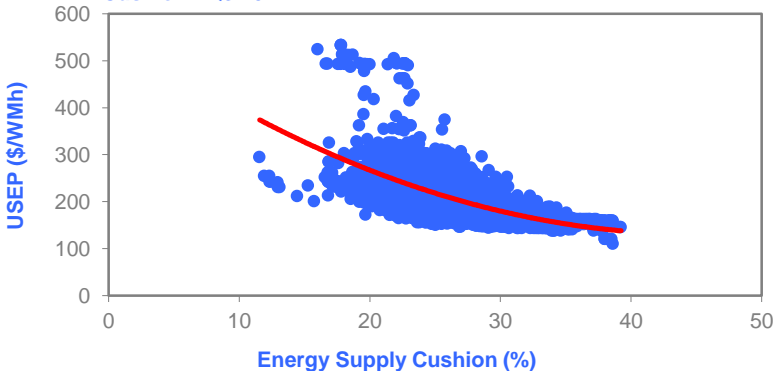
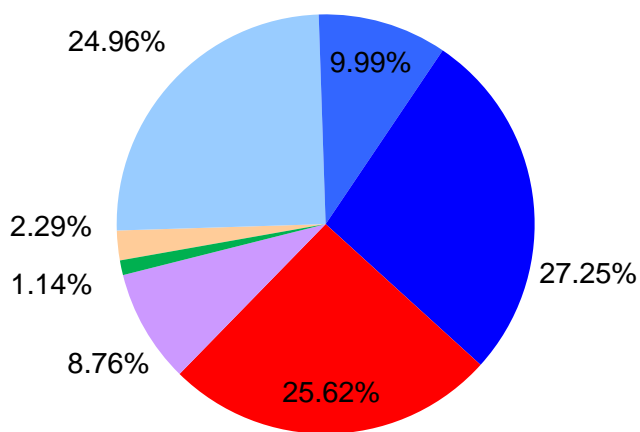
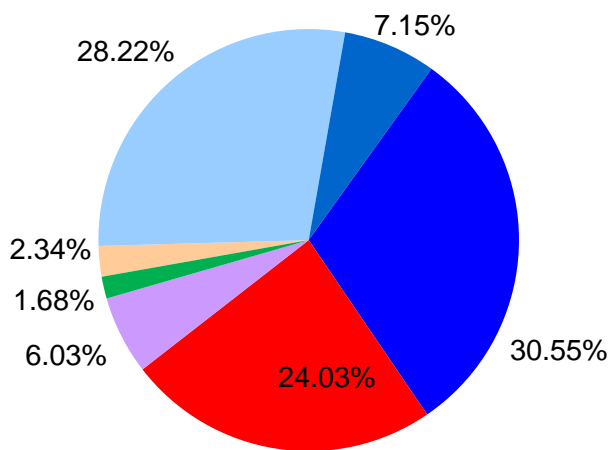


Chart 3: Comparison of Average Market Share by Generation Company Q3 2012



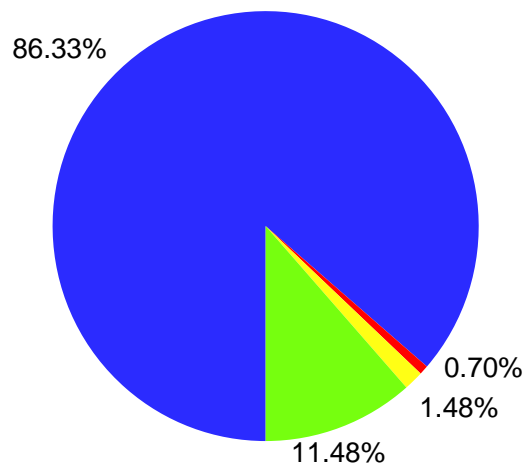
Based on Metered Energy Quantities



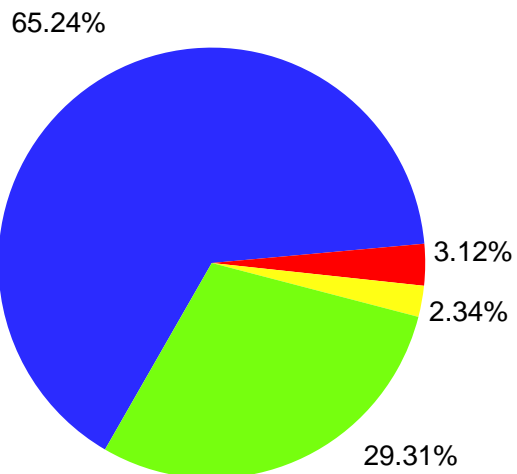
Based on Maximum Generation Capacity

G1 G2 G3 G4 G5 G6 G7

Chart 4: Comparison of Average Market Share by Generation Type Q3 2012



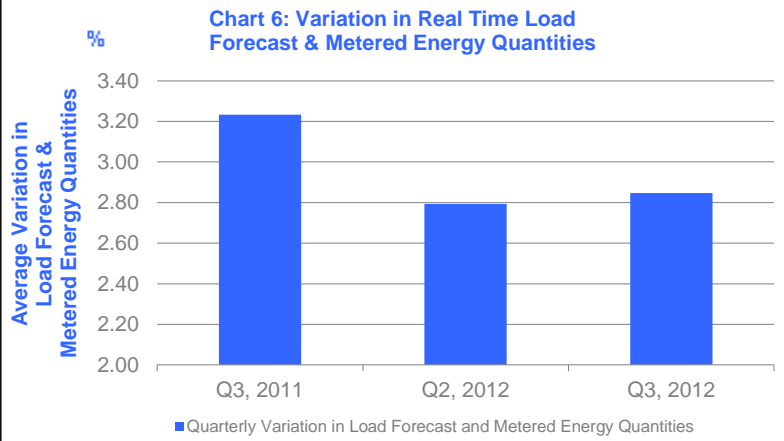
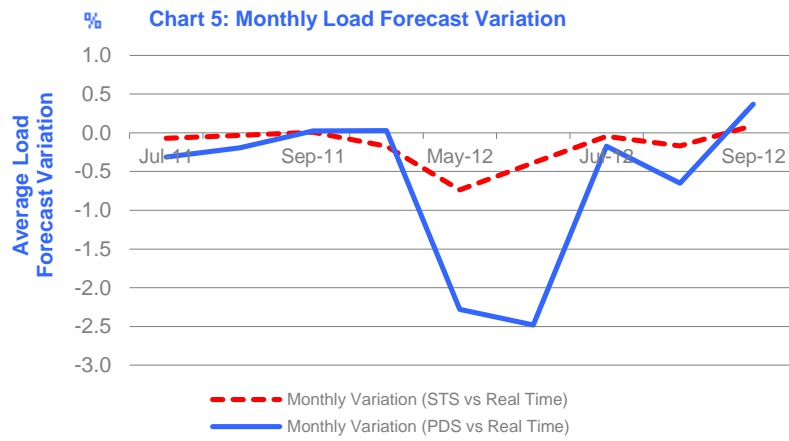
Based on Metered Energy Quantities



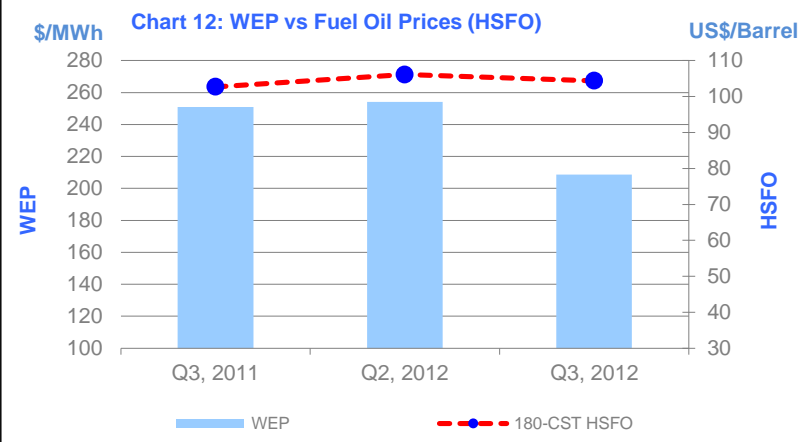
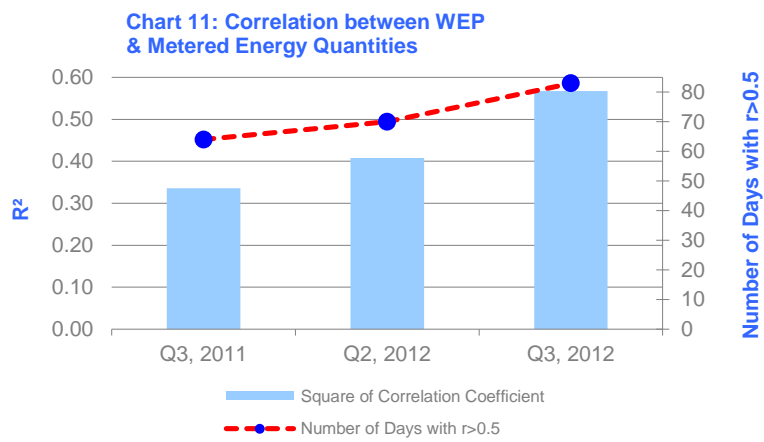
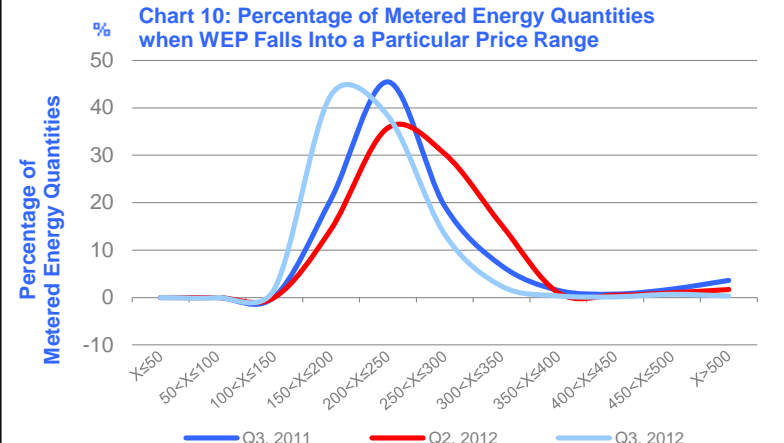
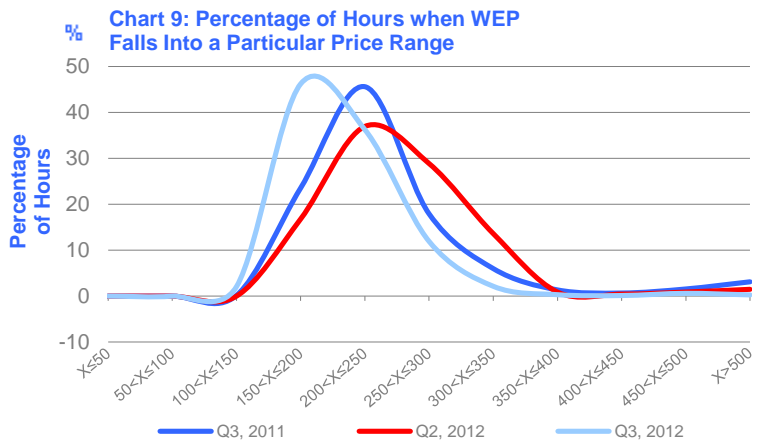
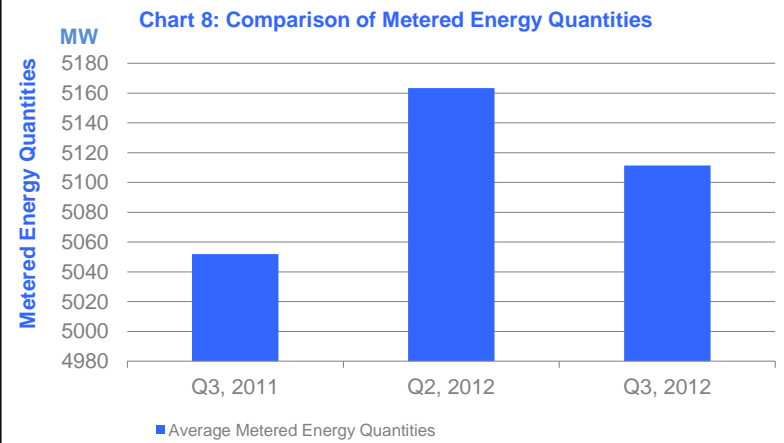
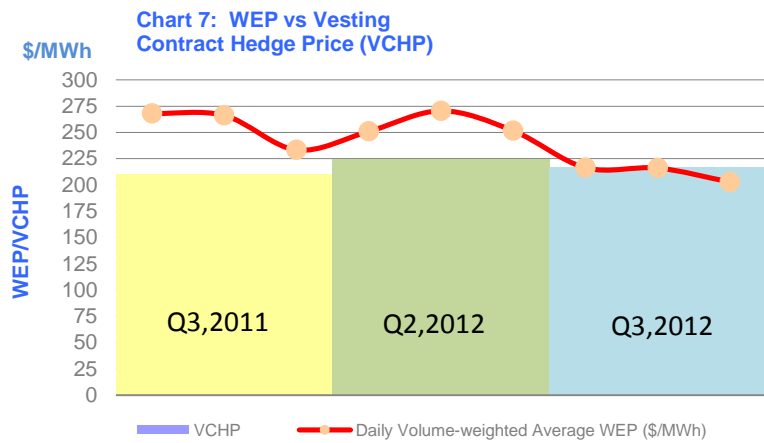
Based on Maximum Generation Capacity

Combine Cycle Plant Gas Turbine Others Steam Turbine

Demand Indicators



Energy Prices



Ancillary Prices

Chart 13: Reserve and Regulation Prices

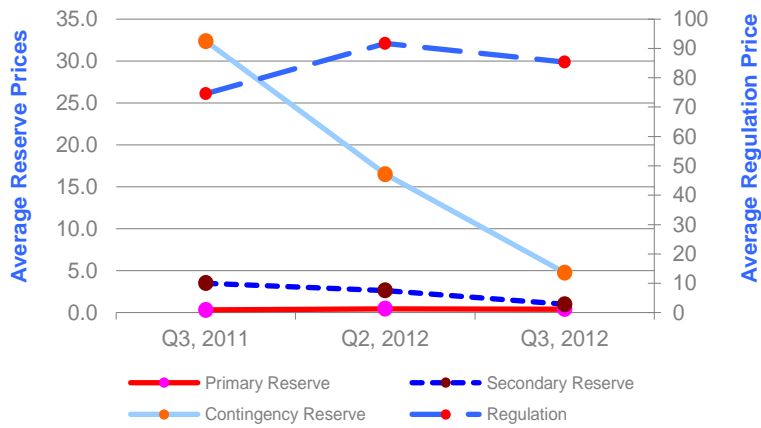


Table 2: Compliance Statistics for Q3 2012

| | |
|--|------------|
| No. of cases of potential rule breaches | 304 |
| Self-reports | 0 |
| Referrals/Complaints | 304 |
| MSCP initiatives | 0 |
| No. of determinations | 313 |
| Rule breach | 1 |
| No rule breach | 312 |
| No further action | 0 |
| Enforcement | 1 |
| No. of cases with enforcement action | |
| -Financial penalty | 1 |
| -Letter of non-compliance | 0 |
| Total amount of financial penalties | \$842,861 |
| Total amount of costs | \$43,750 |

The Market Surveillance and Compliance Panel is comprised of the following persons:

- Thean Lip Ping, Chair
- Lee Keh Sai
- Professor Lim Chin
- TPB Menon
- Philip Chua

It is supported by the Market Assessment Unit of Energy Market Company.