

MSCP Market Watch

Fourth Quarter (Oct-Dec) 2010

Issue 18

Table 1: Indicators of Market Performance

	2009	2010	
	Q4	Q3	Q4
Price Indicators			
<i>Energy (\$/MWh)</i>			
- USEP	160.75	147.74	169.89
- WEP	161.92	150.19	171.30
- VCHP	161.70	175.92	165.56
<i>Ancillary Services (\$/MWh)</i>			
- Primary Reserve	0.36	0.14	0.27
- Secondary Reserve	5.64	1.34	2.97
- Contingency Reserve	9.50	5.33	12.95
- Regulation	52.11	86.12	90.75
HSFO Spot (US\$/barrel)	72.99	71.07	76.02
Demand Indicators			
<i>Forecast Demand (MW)</i>			
- Average	4,719	5,020	5,048
- Peak	5,841	6,095	6,191
<i>Metered Energy (MW)</i>			
- Average	4,593	4,890	4,891
- Peak	5,752	6,001	6,019
Supply Indicators			
<i>Capacity Ratio (%)</i>			
- CCGT	74.80	75.57	74.44
- OCGT	0.27	0.12	0.24
- OT	39.75	41.30	40.00
- ST	24.55	29.31	32.11
Supply Cushion (%)	23.75	24.46	22.09
<i>Total Outages (MWh Cumulative)</i>			
- Planned	2,606,015	1,313,408	2,467,186
- Unplanned	176,075	313,045	189,090
- Forced	180,109	47,976	22,719
Offers made below \$100/MWh (%)	55.66	56.72	55.65

Market Performance

The Uniform Singapore Energy Price (USEP) rose by 14.99 percent from \$147.74/MWh in Q3 2010 to \$169.89/MWh in Q4 2010. This was mirrored by a 14.06 percent increase in the Wholesale Electricity Price (WEP) from \$150.19/MWh in Q3 2010 to \$171.30/MWh in Q4 2010. Meanwhile, the Vesting Contract Hedge Price (VCHP) declined 5.89 percent from \$175.92/MWh to \$165.56/MWh during the same period.

Prices for all three classes of reserve and regulation also increased in Q4 2010. The biggest price increase was observed for the contingency reserve, which rose to \$12.95/MWh from \$5.33/MWh in Q3 2010.

The High Sulphur Fuel Oil (HSFO) price increased by 6.97 percent from US\$71.07/barrel to US\$76.02/barrel.

The key factor in the increase in USEP in Q4 2010 was the 2.37 percent decline in the supply cushion, from 24.46 percent to 22.09 percent. This decline was brought on by a slight increase in demand by 0.56 percent from 5020MW to 5048MW and a reduction in available low-priced offers.

Unplanned outage and forced outage fell in Q4 2010. Unplanned outage decreased by 39.60 percent from 313,045 MWh to 189,090 MWh while forced outage fell by 52.65 percent from 47,976 MWh to 22,719 MWh.

However, planned outage rose by 87.85 percent from 1,313,408 MWh to 2,467,186 MWh, implying that the total level of outage was much higher than a quarter ago. Moreover, a significant portion of planned maintenance was carried out for CCGT units, resulting in offer bids that were more expensive in general. This could be seen from the 1.07 percent drop in the quantity of offers made below \$100/MWh.

No price spike above \$1,000/MWh was observed in Q4 2010.

Supply Indicators

Chart 1: Capacity Ratio of Generation Plants

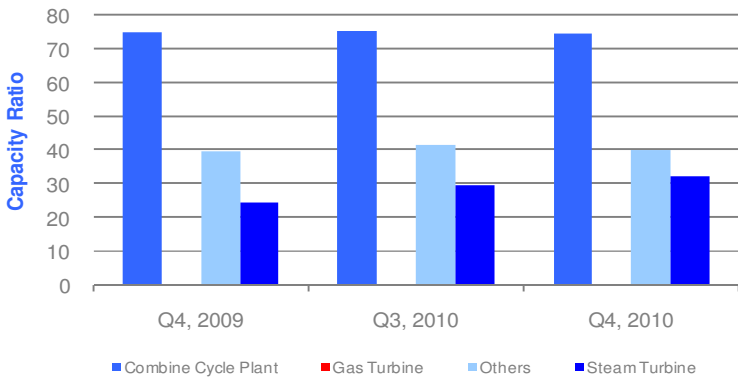


Chart 2: Relationship between USEP and Energy Supply Cushion - Q4 2010

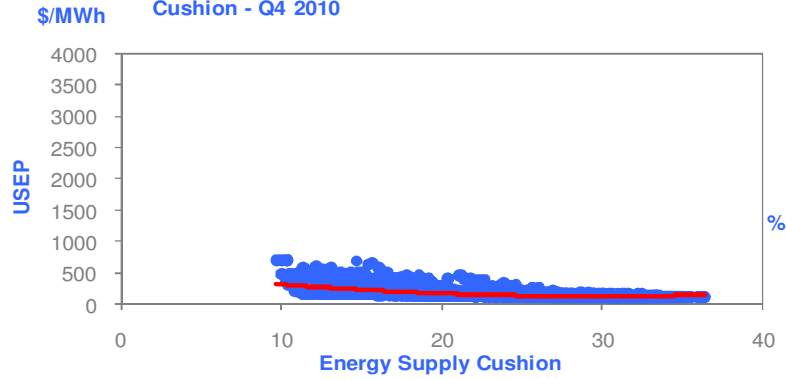
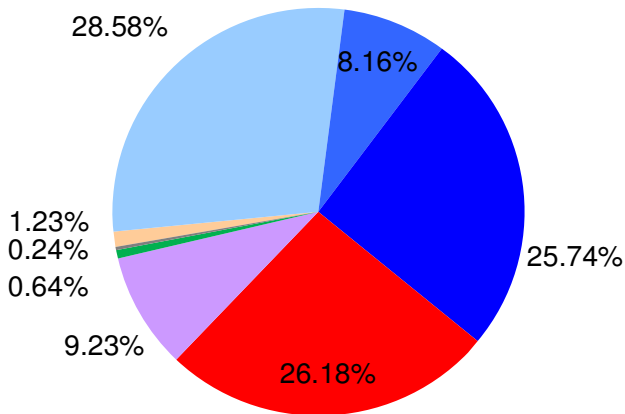
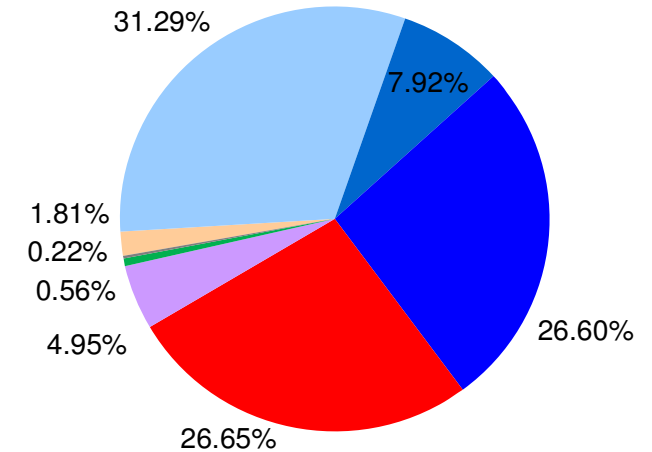


Chart 3: Comparison of Average Market Share by Generation Company Q4 2010



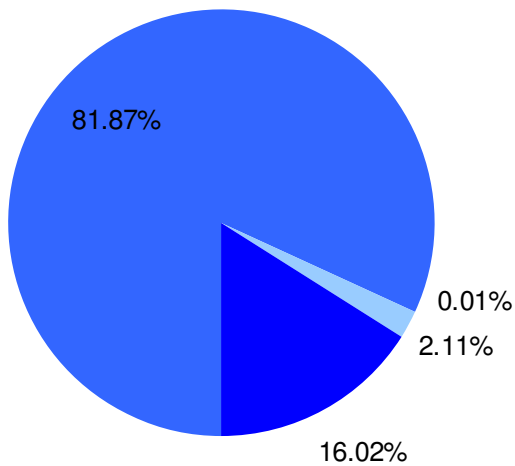
Based on Metered Energy Quantities

G1 G2 G3 G4 G5 G6 G7 G8



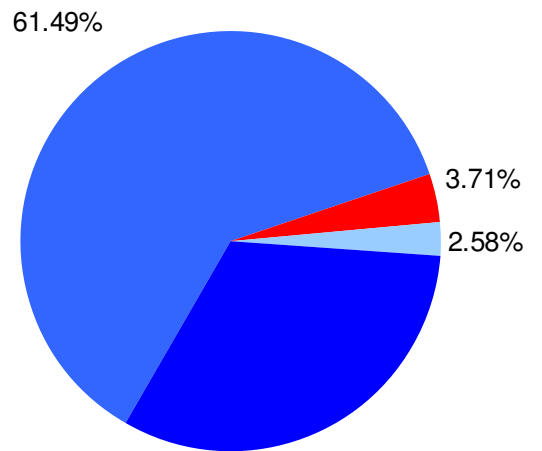
Based on Maximum Generation Capacity

Chart 4: Comparison of Average Market Share by Generation Type Q4 2010



Based on Metered Energy Quantities

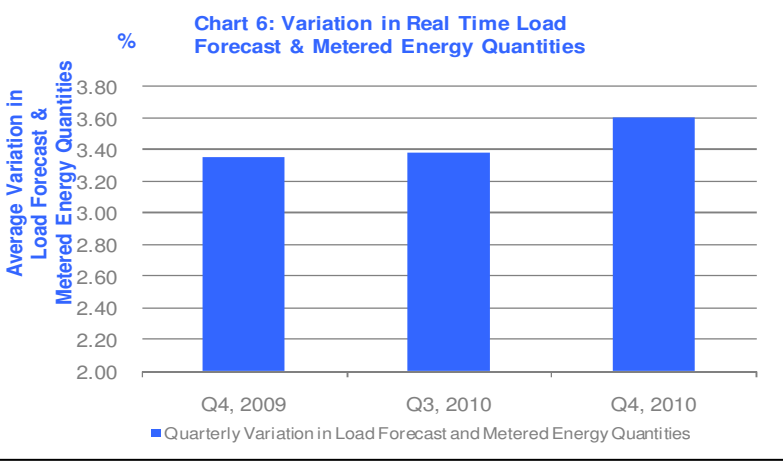
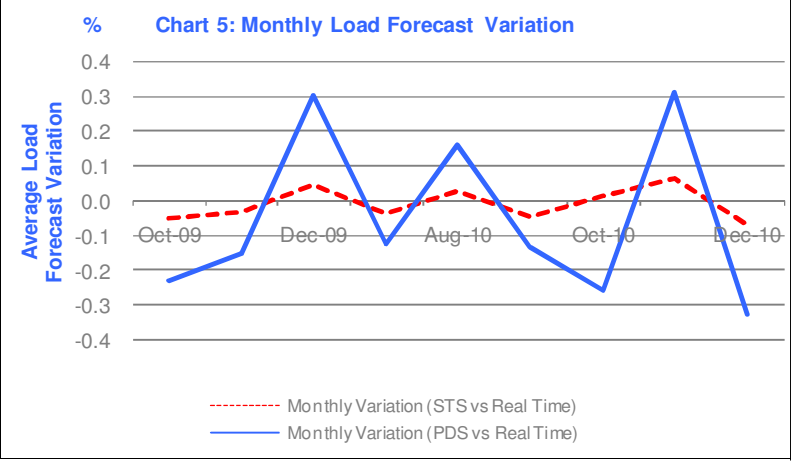
Combined Cycle Plant Gas Turbine



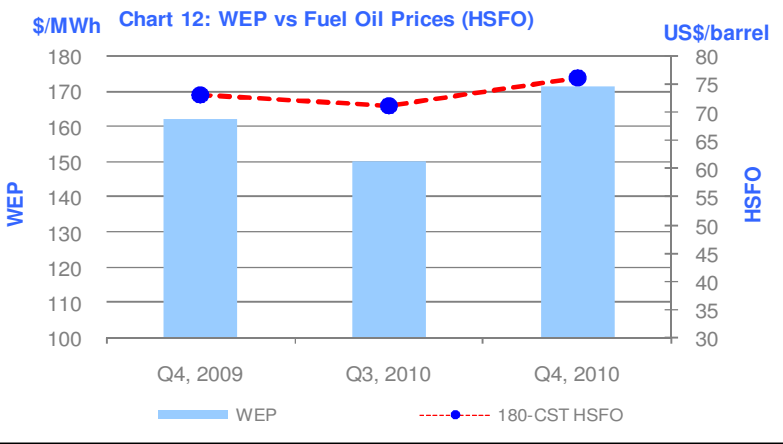
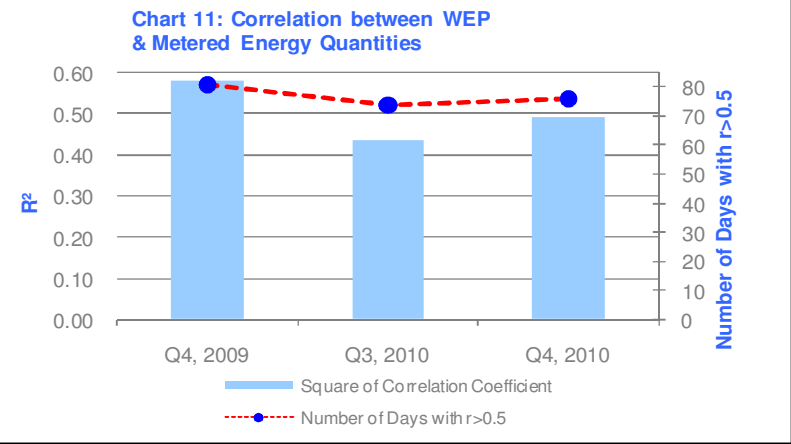
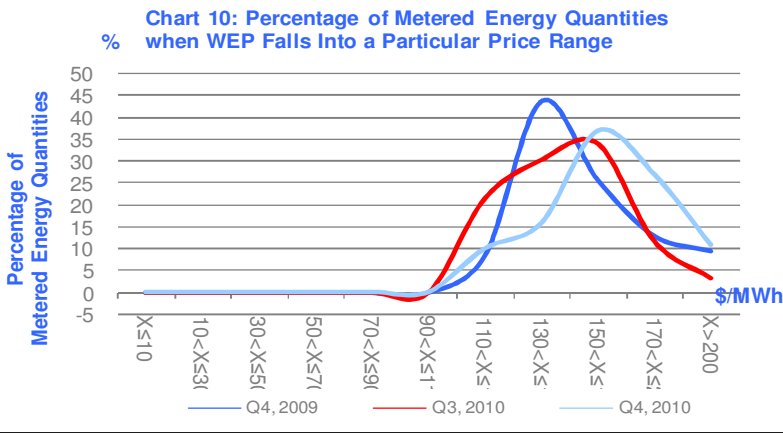
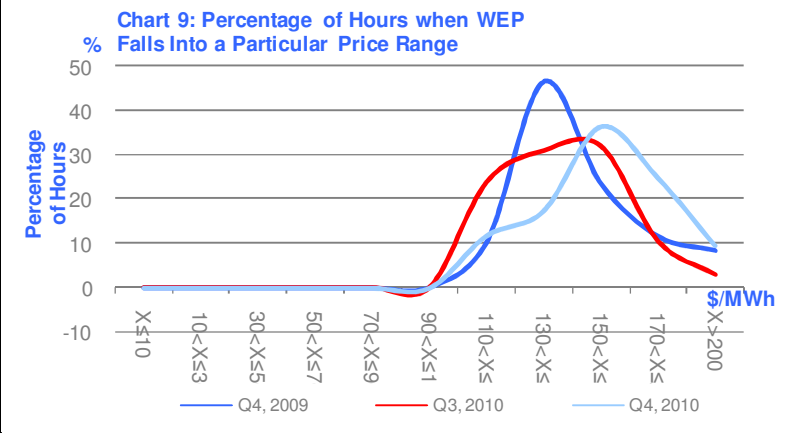
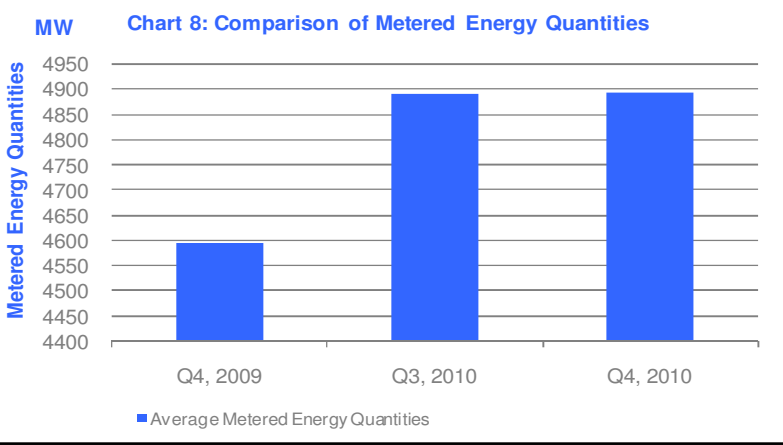
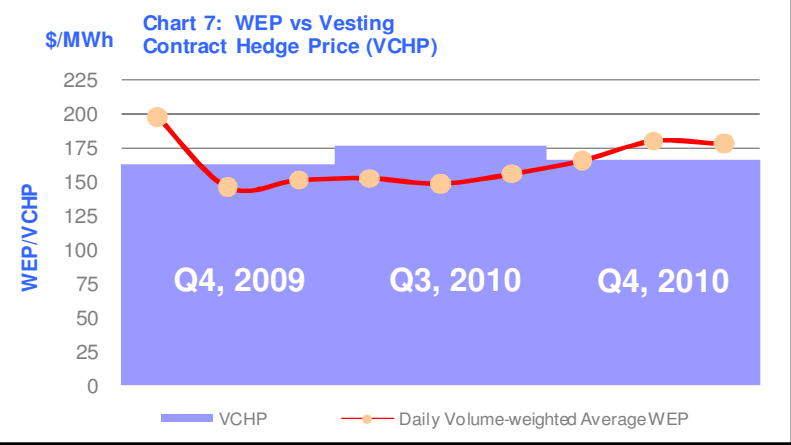
Based on Maximum Generation Capacity

Others Steam Turbine

Demand Indicators



Energy Prices



Ancillary Prices

Chart 13: Reserve and Regulation Prices

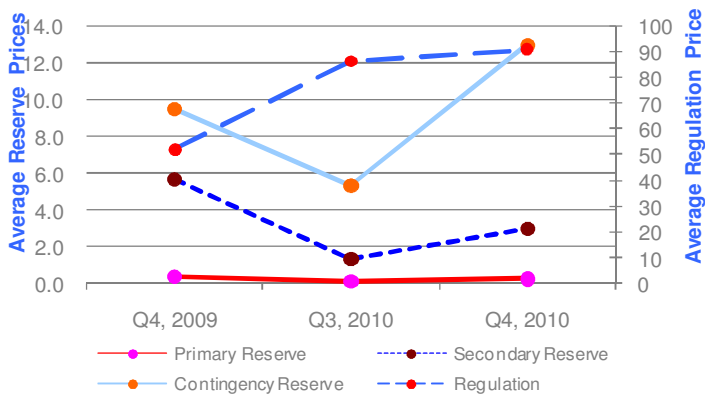


Table 2: Compliance Statistics for Q4 2010

No. of cases of potential rule breaches	254
Self-reports	1
Referrals/Complaints	253
MSCP initiatives	0
No. of determinations	420
Rule breach	0
No rule breach	411
No further action	9
Enforcement	0
No. of cases with enforcement action	0
-Financial penalty	0
-Letter of non-compliance	0
Total amount of financial penalties	\$0
Total amount of costs	\$0

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.