

MSCP Market Watch

Third Quarter (Jul-Sep) 2009

Issue 13

Table 1: Indicators of Market Performance

	2008	2009	
	Q3	Q2	Q3
Price Indicators			
<i>Energy (\$/MWh)</i>			
- USEP	195.96	185.39	158.75
- WEP	196.26	186.42	159.48
- VCHP	183.25	115.26	138.92
<i>Ancillary Services (\$/MWh)</i>			
- Primary Reserve	0.19	4.75	0.73
- Secondary Reserve	0.12	18.71	6.64
- Contingency Reserve	3.25	40.70	12.95
- Regulation	33.82	81.80	48.53
HSFO Spot (US\$/barrel)	102.54	53.57	65.88
Demand Indicators			
<i>Forecast Demand (MW)</i>			
- Average	4,661	4,689	4,737
- Peak	5,748	5,876	5,859
<i>Metered Energy (MW)</i>			
- Average	4,519	4,552	4,604
- Peak	5,596	5,748	5,743
Supply Indicators			
<i>Capacity Ratio (%)</i>			
- CCGT	80.67	79.57	81.82
- OCGT	0.11	0.98	0.38
- OT	42.58	45.23	42.09
- ST	19.40	22.63	20.98
Supply Cushion (%)	23.96	22.96	22.45
<i>Total Outages (MWh Cumulative)</i>			
- Planned	1,481,701	2,438,125	2,309,979
- Unplanned	591,156	94,525	315,018
- Forced	22,761	14,167	114,751
Offers made below \$100/MWh (%)	55.69	69.76	57.91

Market Performance

After rising to a high of \$185.39/MWh in Q2 2009, the average USEP in Q3 declined by 14.4% to \$158.75/MWh. Similarly, the average WEP declined from \$186.42/MWh to \$159.48/MWh. These declines were accompanied by an increase of 20.5% in the VCHP from \$115.26/MWh to \$138.92/MWh.

Correspondingly, the average reserve and regulation prices declined in Q3 2009. The biggest drop was observed in the price of primary reserve, decreasing from \$4.75/MWh to \$0.73/MWh. The regulation price fell from a high of \$81.80/MWh to \$48.50/MWh. However, in a year-on-year comparison, reserve and regulation prices in Q3 2009 were higher than those of Q3 2008.

In contrast to falling energy, reserve and regulation prices, the average demand in Q3 2009 increased slightly by 1.02% to 4,737MW. Increased demand was matched by a slight decline in the supply cushion, which fell 0.51% from 22.96% to 22.45%. The average 180-CST HSFO spot price increased by 22.98% from US\$53.57/barrel to US\$65.88/barrel.

Both unplanned and forced outages increased sharply in Q3 2009. Unplanned outages increased by 233.26% from 94,525 MWh to 315,018 MWh, while forced outages increased by 709.99% from 14,167 MWh to 114,571 MWh. Both the increases in unplanned and forced outages can be attributed to an ST unit on outage for over a month due to a generator grounding fault.

There were 12 periods in Q3 2009 in which the USEP rose above \$1,000/MWh. Four of these periods occurred on 4 September 2009, just after the forced outage. Another six of these periods occurred on a Sunday when there was an unexpected rise in demand and a tight supply cushion of below 20%.

Supply Indicators

Chart 1: Capacity Ratio of Generation Plants

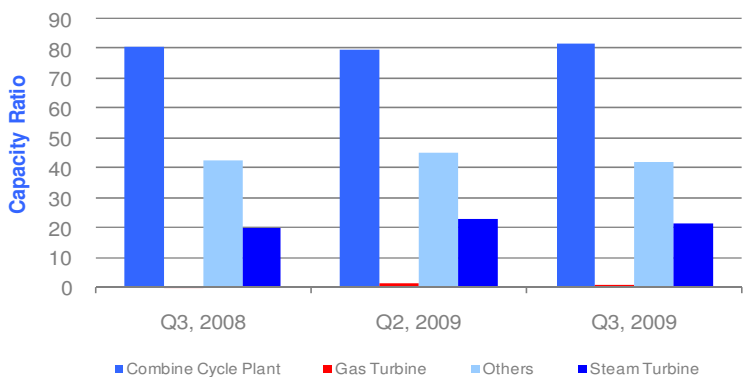


Chart 2: Relationship between USEP and Energy Supply Cushion - Q3 2009

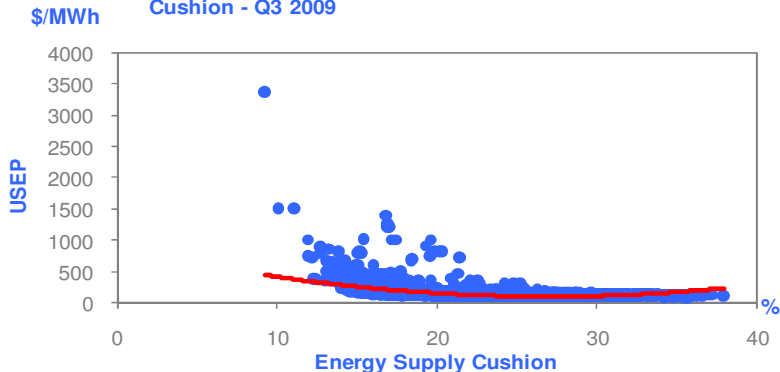
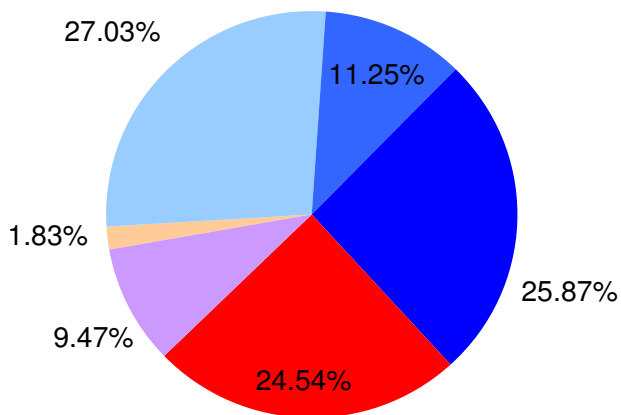
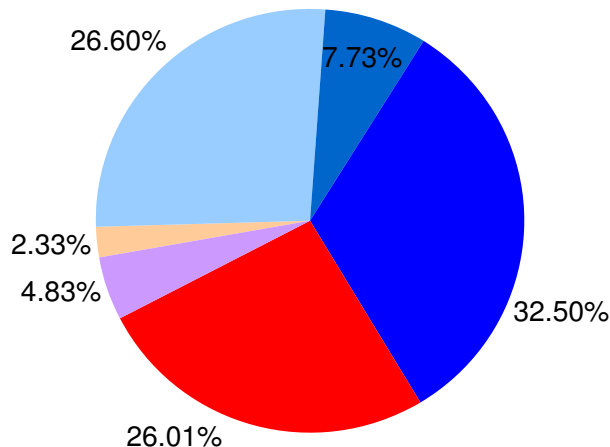


Chart 3: Comparison of Average Market Share by Generation Company Q3 2009

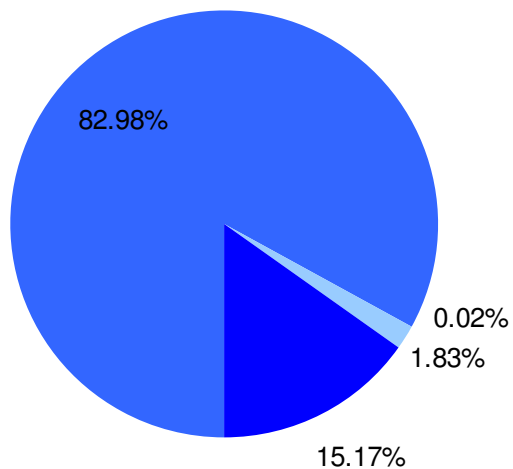


Based on Metered Energy Quantities

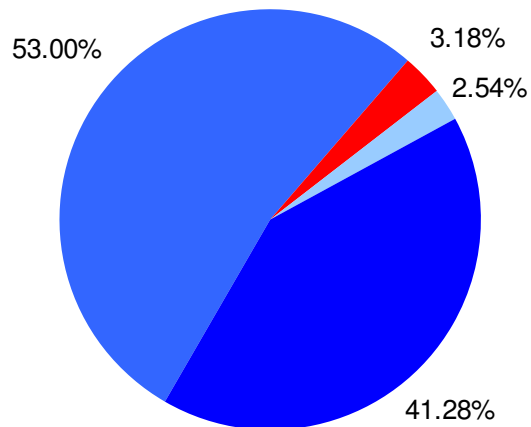


Based on Maximum Generation Capacity

Chart 4: Comparison of Average Market Share by Generation Type Q3 2009



Based on Metered Energy Quantities



Based on Maximum Generation Capacity

Demand Indicators

Chart 5: Monthly Load Forecast Variation

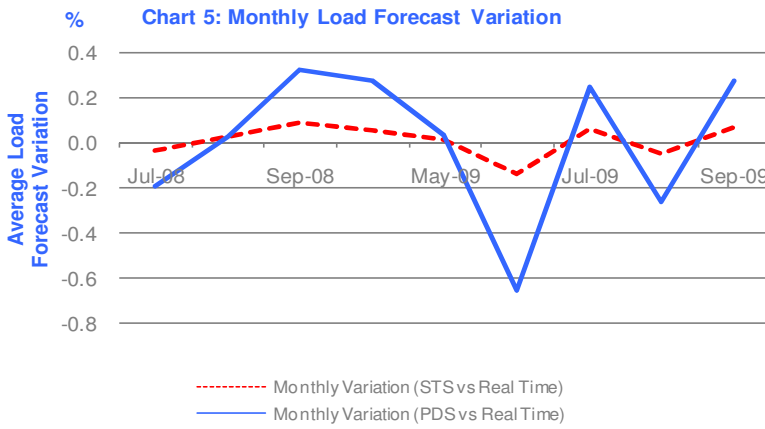
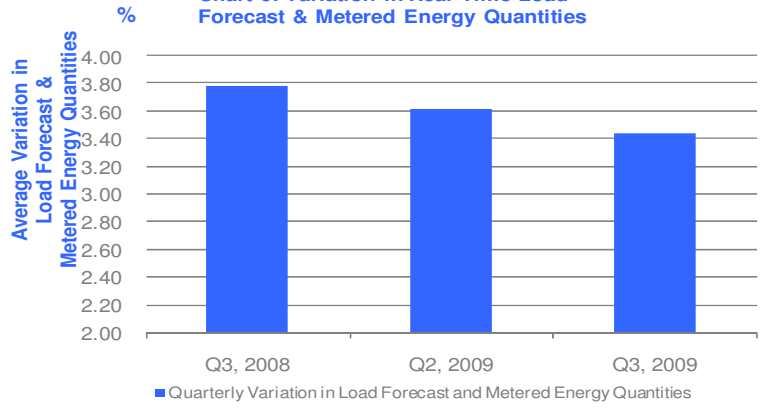


Chart 6: Variation in Real Time Load Forecast & Metered Energy Quantities



Energy Prices

Chart 7: WEP vs Vesting Contract Hedge Price (VCHP)

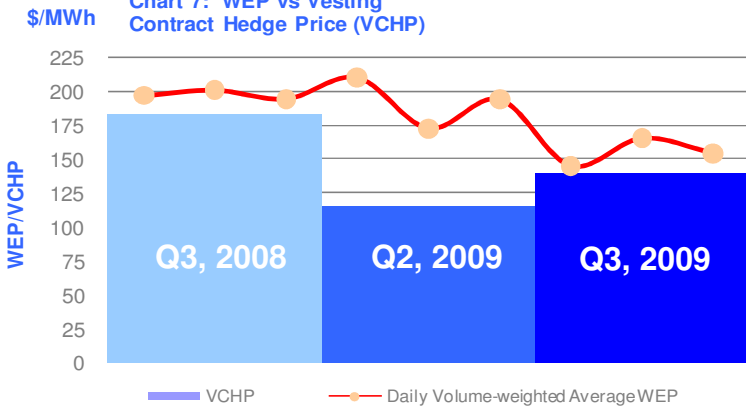


Chart 8: Comparison of Metered Energy Quantities

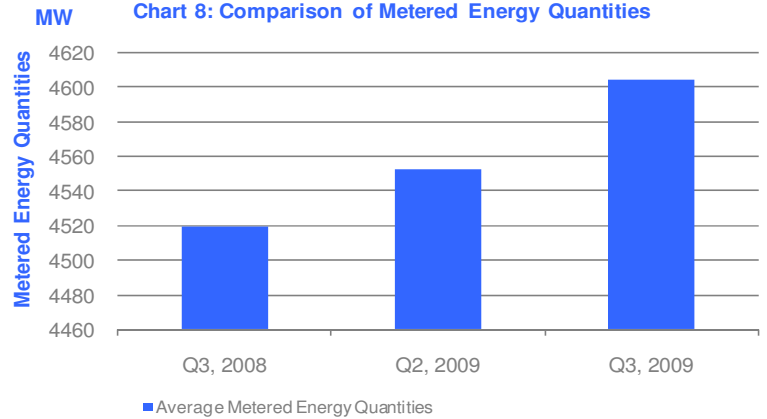


Chart 9: Percentage of Hours when WEP Falls into a Particular Price Range

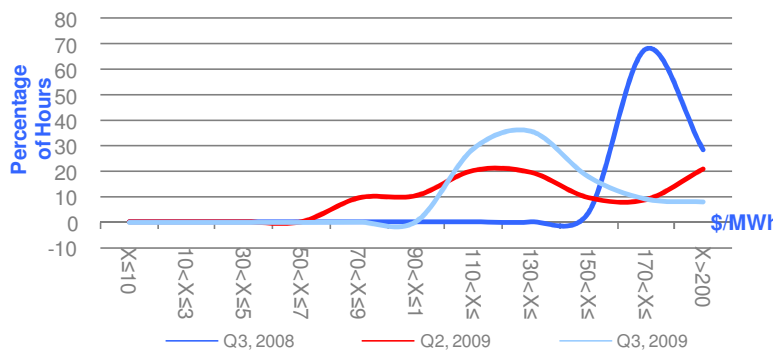


Chart 10: Percentage of Metered Energy Quantities when WEP Falls into a Particular Price Range

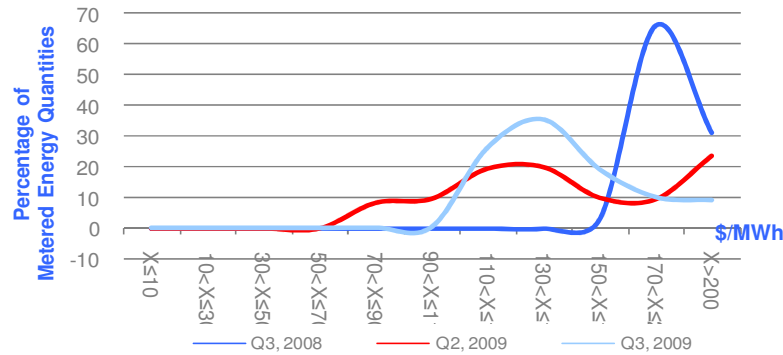


Chart 11: Correlation between WEP & Metered Energy Quantities

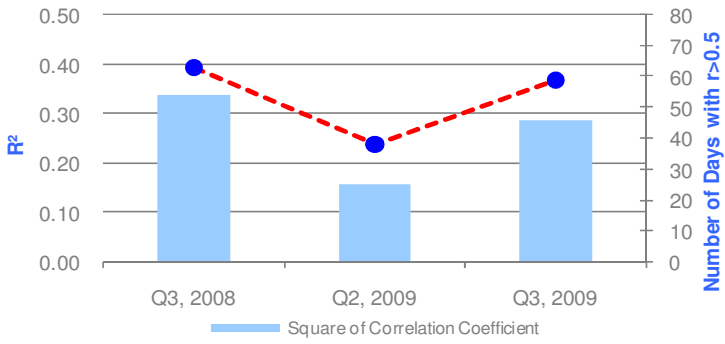
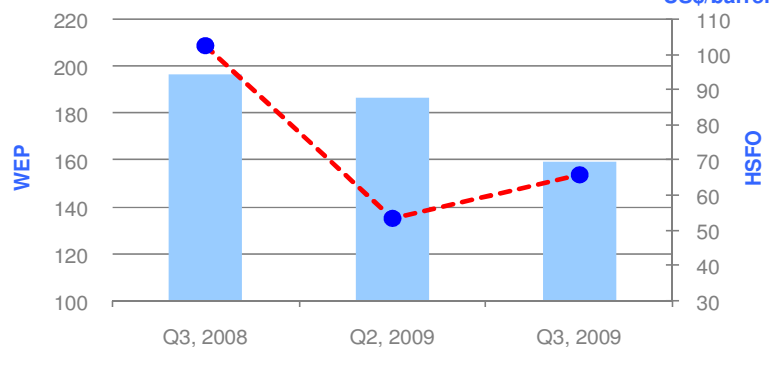


Chart 12: WEP vs Fuel Oil Prices (HSFO)



Ancillary Prices

Chart 13: Reserve and Regulation Prices

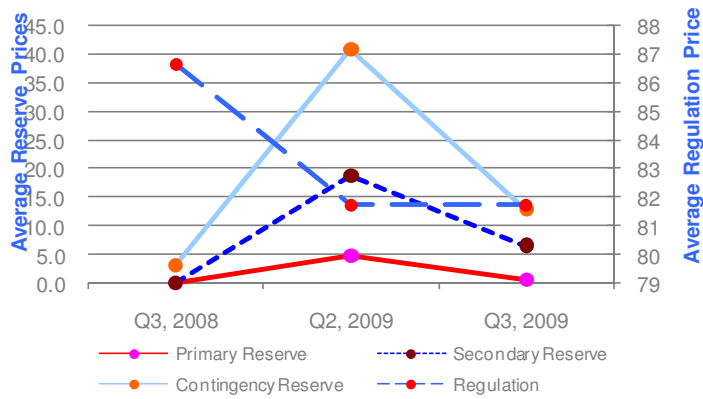


Table 2: Compliance Statistics for Q3 2009	
No. of cases of potential rule breaches	392
Self-reports	1
Referrals/Complaints	391
MSCP initiatives	0
No. of determinations	406
Rule breach	16
No rule breach	386
No further action	4
Enforcement	3
No. of cases with enforcement action	
-Financial penalty	1
-Letter of non-compliance	2
Total amount of financial penalties	\$12,500
Total amount of costs	\$3,400

The Market Surveillance and Compliance Panel comprises the following persons:

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

The MSCP is supported by the Market Assessment Unit of Energy Market Company.