National Electricity Market of Singapore

MSCP Market Watch

Fourth Quarter (Oct-Dec) 2009

Issue 14

Table 1: Indicators of Market Performance

	2008	2009	
	Q4	Q3	Q4
Price Indicators			
Energy ($/MWh)			
- USEP	114.36	158.75	160.75
- WEP	115.49	159.48	161.92
- VCHP	238.64	138.92	161.70
Ancillary Services ($/MWh)			
- Primary Reserve	0.90	0.73	0.36
- Secondary Reserve	1.62	6.64	5.64
- Contingency Reserve	3.99	12.95	9.50
- Regulation	47.14	48.53	52.11
HSFO Spot (US$/barrel)	45.02	65.88	72.99
Demand Indicators			
Forecast Demand (MW)			
- Average	4,436	4,737	4,719
- Peak	5,634	5,859	5,841
Metered Energy (MW)			
- Average	4,309	4,604	4,593
- Peak	5,513	5,743	5,752
Supply Indicators			
Capacity Ratio (%)			
- CCGT	78.30	81.82	74.80
- OCGT	0.07	0.38	0.27
- OT	47.81	42.09	39.75
- ST	16.95	20.98	24.55
Supply Cushion (%)	26.03	22.45	23.75
Total Outages (MWh Cumulative)			
- Planned	1,499,911	2,309,979	2,606,015
- Unplanned	983,261	315,018	176,075
- Forced	40,632	114,751	180,109
Offers made below $100/MWh (%)	68.82	57.91	55.66

Market Performance

Both the USEP and WEP were little changed from Q3 to Q4 2009. The USEP rose by 1.26%, from $158.75/MWh to $160.75/MWh, while the WEP rose by 1.53% from $159.48/MWh to $161.92/MWh. The regulated VCHP, however, rose by 16.40% from $138.92/MWh to $161.70/MWh.

Prices for all three classes of reserve declined, while prices for regulation increased slightly in Q4. The biggest decline was in the primary reserve price, which decreased from $0.73/MWh to $0.36/MWh. On the other hand, the regulation price rose 7.38%, from $48.53/MWh to $52.11/MWh.

Average forecast demand and actual demand remained relatively unchanged from Q3 to Q4. The variations in quarter-over-quarter forecast demand and actual demand were less than 0.5%. Meanwhile, the HSFO spot price increased by 10.80%, from US$65.88/barrel to US$72.99/barrel. The supply cushion increased slightly by 1.3% to reach 23.75%.

In Q4, the volume of planned outages increased by 12.82%, from 2,309,979 MWh to 2,606,015 MWh. In contrast, unplanned outages declined 44.11% from 315,018 MWh to 176,075 MWh. Forced outage quantities increased by 56.96%, from 114,751 MWh to 180,109 MWh. This increase was primarily due to the outage of an OCGT unit that had been recently repowered. The outage had no significant impact on prices.

There were eight periods in Q4 when the USEP rose above $1,000/MWh. The high periodic USEP on 6 October was due to the forced outage of two ST units, while the high USEPs on 13 October were due to the forced outage of a CCGT unit. Other instances of high prices on 9 October, 20 October and 2 December were primarily due to unexpected increases in demand that tightened the supply cushion.

A User Guide on terms used in this publication is available for download from the Energy Market Company website at www.emcsg.com.

Supply Indicators

Chart 1: Capacity Ratio of Generation Plants

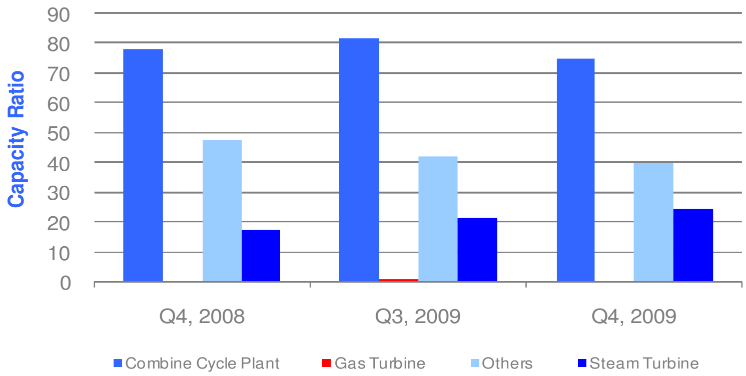


Chart 2: Relationship between USEP and Energy Supply Cushion - Q4 2009

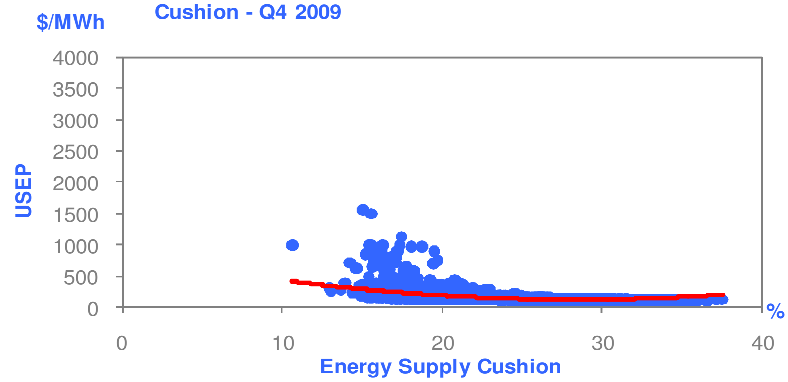


Chart 3: Comparison of Average Market Share by Generation Company Q4 2009

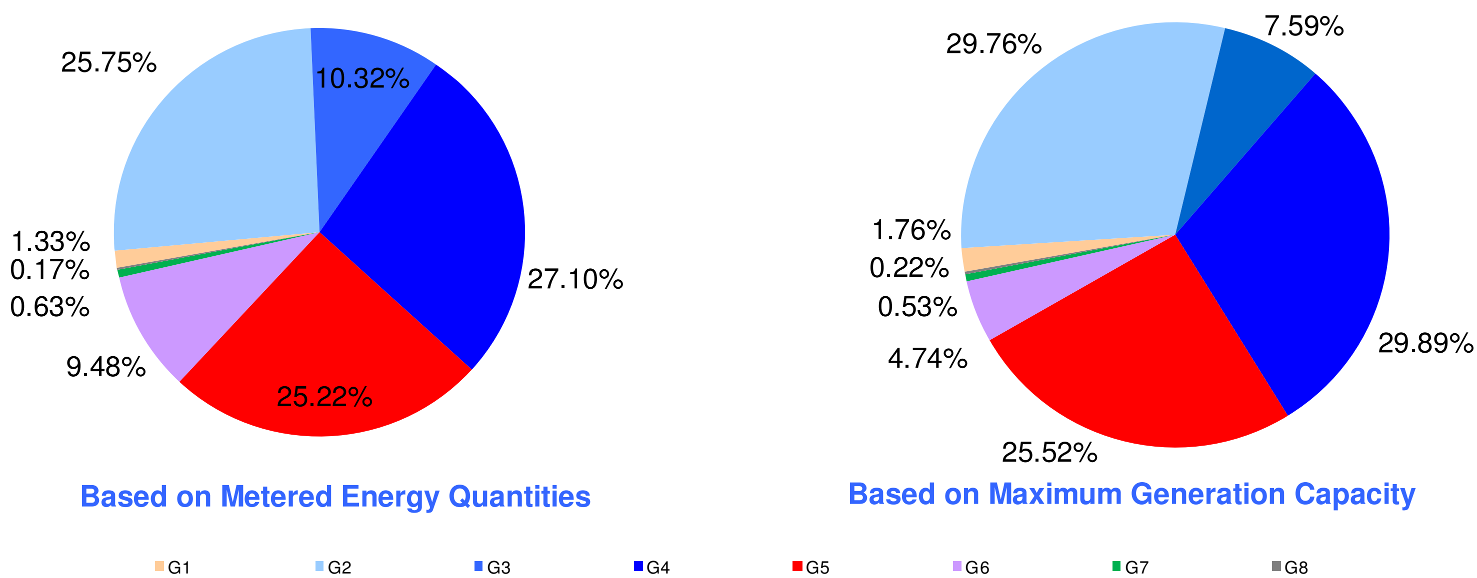
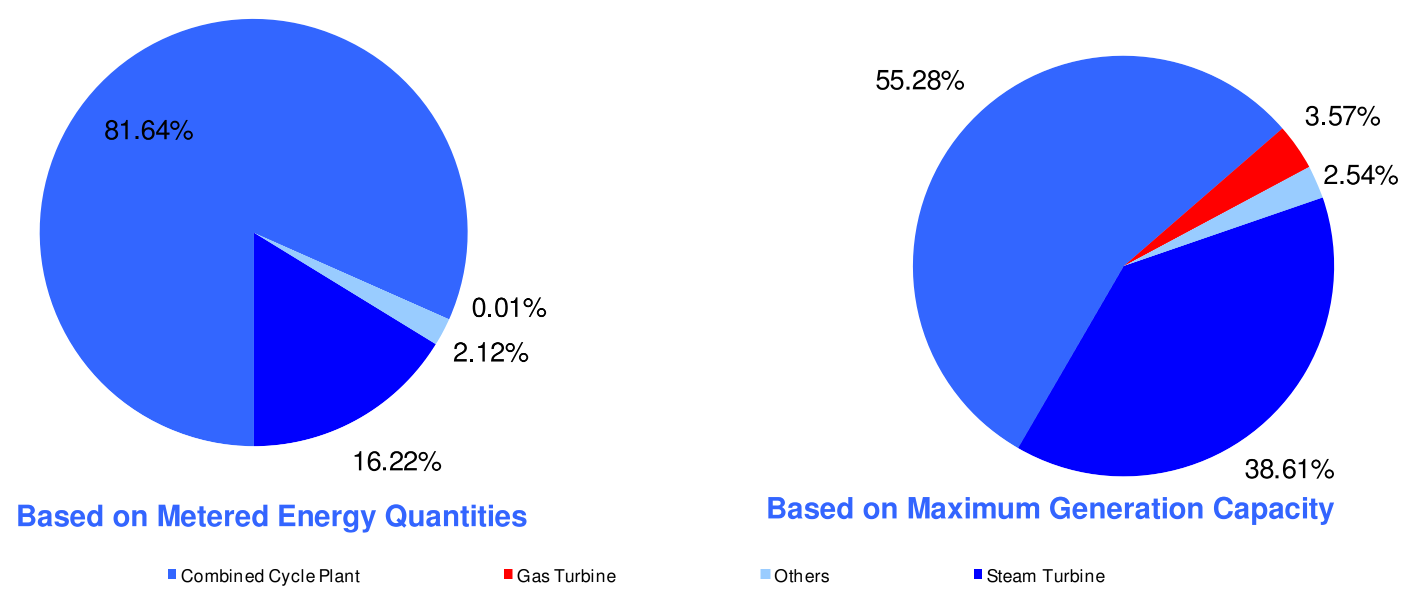
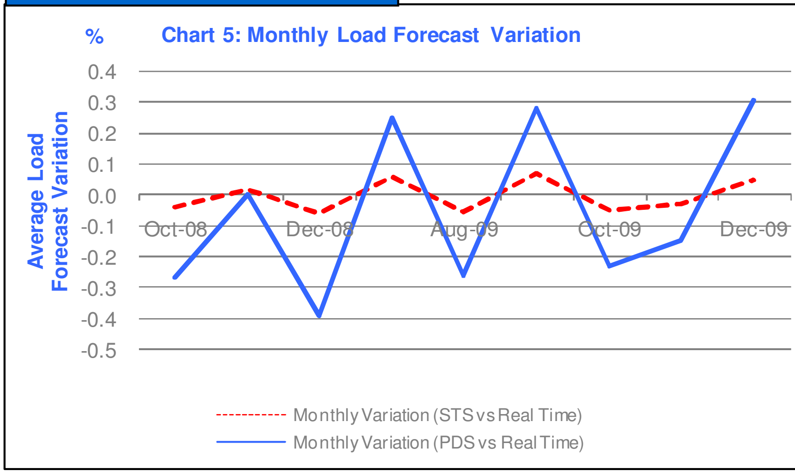
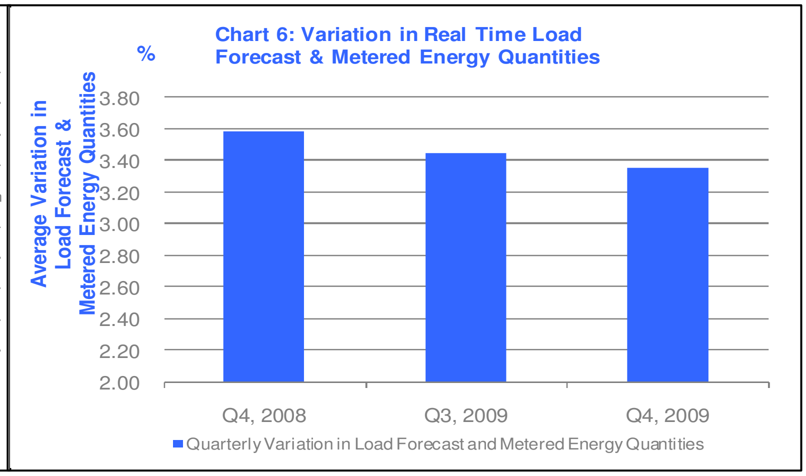


Chart 4: Comparison of Average Market Share by Generation Type Q4 2009

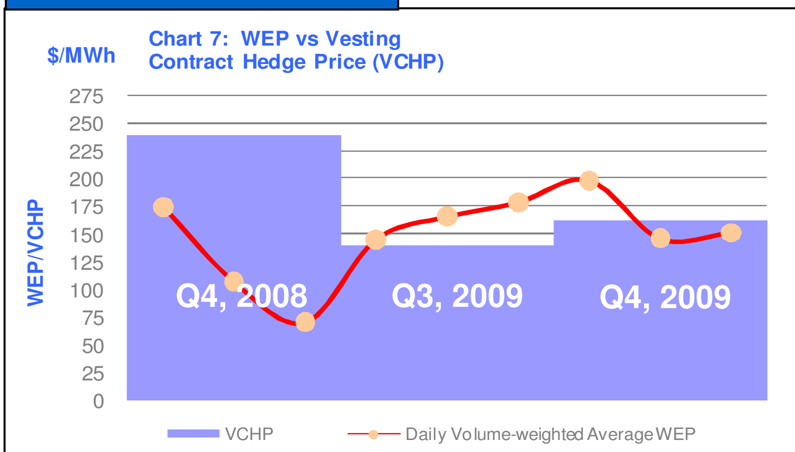


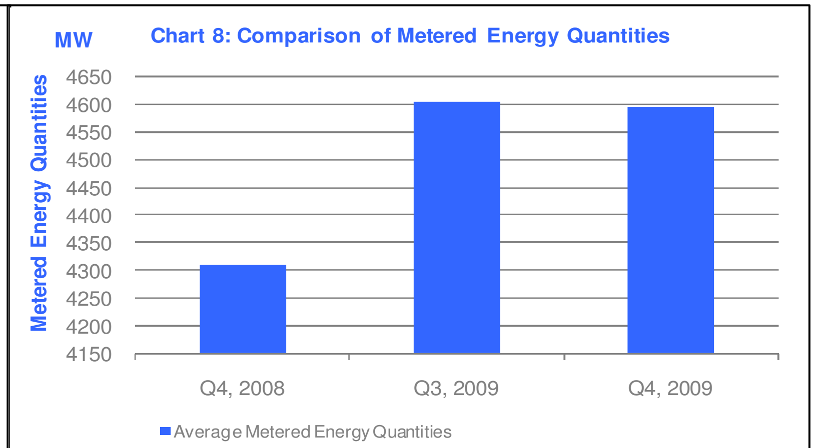
Demand Indicators

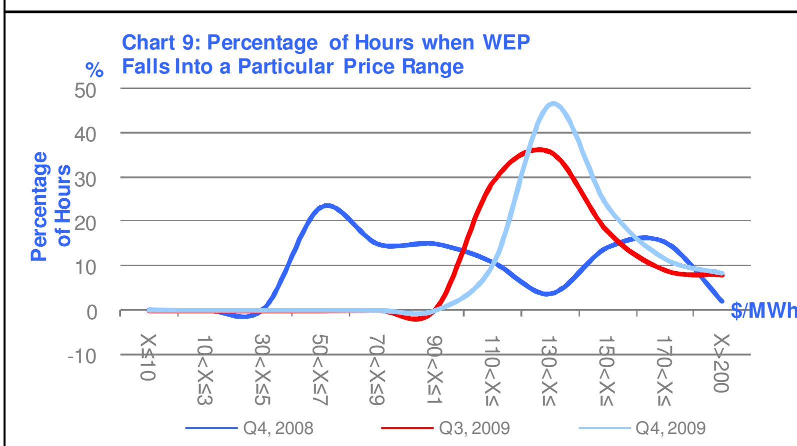


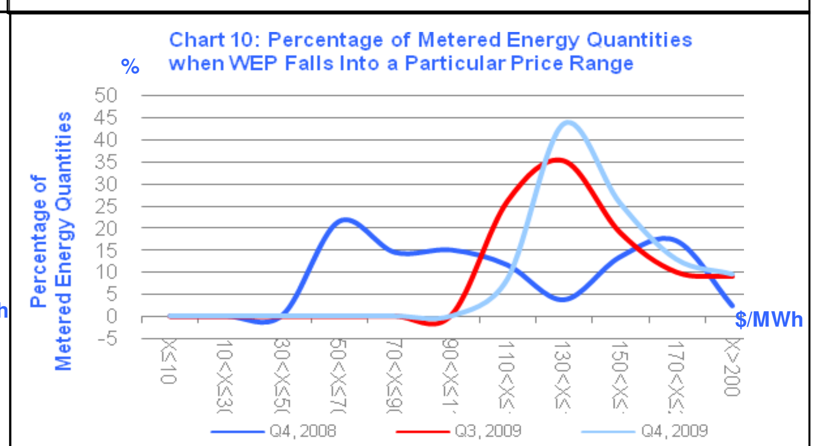


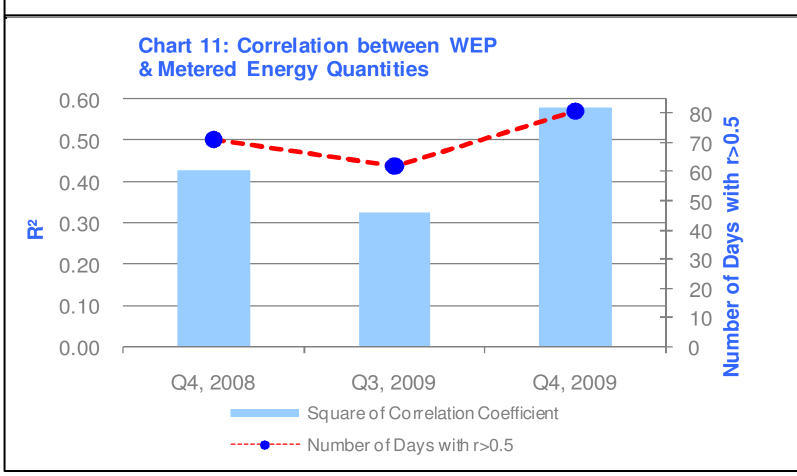
Energy Prices

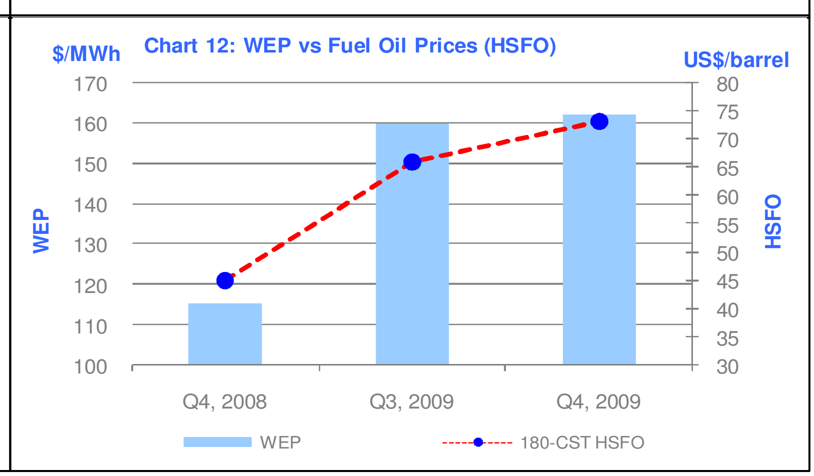












Ancillary Prices

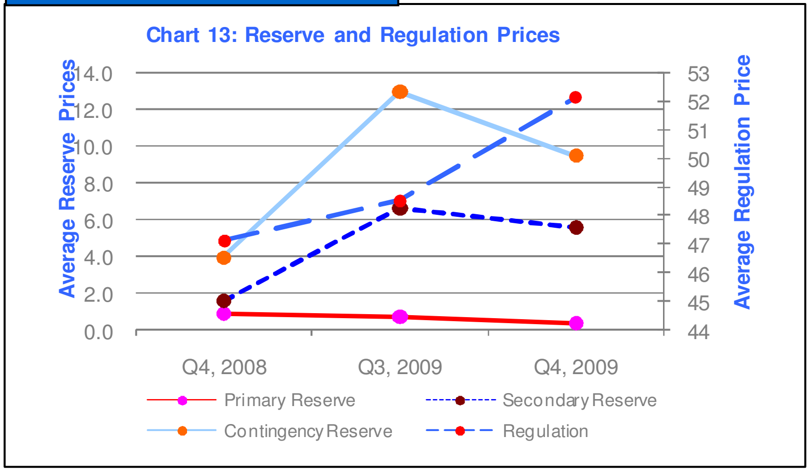


Table 2: Compliance Statistics for Q4 2009	
No. of cases of potential rule breaches	**718**
Self-reports	2
Referrals/Complaints	716
MSCP initiatives	0
No. of determinations	**277**
Rule breach	0
No rule breach	263
No further action	14
Enforcement	0
No. of cases with enforcement action	
-Financial penalty	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.