

MSCP Market Watch

First Quarter (Jan-Mar) 2014

Issue 31

Table 1: Indicators of Market Performance

	2013		2014
	Q1	Q4	Q1
Price Indicators			
<i>Energy (\$/MWh)</i>			
- USEP	174.72	154.83	139.20
- WEP	176.09	154.81	139.84
- Allocated Vesting Price	-	197.10	192.93
- LNG Vesting Price	-	201.73	197.30
- Balance Vesting Price	-	195.25	190.09
<i>Ancillary Services (\$/MWh)</i>			
- Primary Reserve	2.55	0.79	3.27
- Secondary Reserve	6.12	1.28	6.67
- Contingency Reserve	9.68	7.95	5.60
- Regulation	81.75	96.32	37.45
HSFO Spot (US\$/barrel)	101.63	97.46	97.48
Demand Indicators			
<i>Forecast Demand (MW)</i>			
- Average	5,114	5,316	5,279
- Peak	6,361	6,537	6,516
<i>Metered Energy (MW)</i>			
- Average	5,004	5,174	5,147
- Peak	6,328	6,463	6,429
Supply Indicators			
Average Supply (MW)	6,920	7,223	7,669
Supply Cushion (%)	26.09	26.38	31.17
<i>Capacity Ratio (%)</i>			
- CCGT	66.49	66.94	62.91
- OCGT	0.76	0.30	0.24
- OT	51.80	51.29	52.26
- ST	9.40	4.66	0.18
<i>Total Outages (MWh Cumulative)</i>			
- Planned	2,164,079	1,888,177	1,465,922
- Forced	52,249	117,870	37,726
<i>Offers made at or below \$100/MWh (%)</i>			
	58.96	57.51	53.90

Market Performance

The Uniform Singapore Energy Price (USEP) decreased 10.09 percent from \$154.83/MWh in Q4 2013 to \$139.20/MWh in Q1 2014. In line with the decrease in the USEP, the Wholesale Electricity Price (WEP) decreased 9.67 percent to \$139.84/MWh in Q1 2014. Vesting prices decreased across the board in Q1 2014. The largest price movement was in the Balance Vesting Price, which decreased 2.64 percent to \$190.09/MWh in Q1 2014.

In respect of ancillary services, price movements of primary and secondary reserve increased in Q1 2014, while the prices of contingency reserve and regulation decreased. Secondary reserve price increased by 4.21 times to \$6.67/MWh in Q1 2014. Regulation price decreased 61.12 percent in Q1 2014 to \$37.45/MWh.

The High Sulphur Fuel Oil (HSFO) spot price increased 0.02 percent from US\$97.46/barrel in Q4 2013 to US\$97.48/barrel in Q1 2014.

The supply cushion, which measures supply adequacy, increased 4.79 percentage points from 26.38 percent in Q4 2013 to 31.17 percent in Q1 2014. Demand decreased 0.51 percent to 5,147MW while supply increased 6.18 percent to 7,669MW in Q1 2014. This quarter saw lower capacity ratios from all unit types except OT – the capacity ratios of CCGT and ST decreased 4.03 and 4.48 percentage points respectively. The capacity ratio of OT increased 0.96 percentage point in Q1 2014.

Planned outage volume decreased 22.36 percent from 1,888,177 MWh in Q4 2013 to 1,465,922 in Q1 2014. Forced outage volume decreased 67.99 percent to 37,726 MWh in Q1 2014.

The MSCP issued no determination of rule breach in Q1 2014.

Supply Indicators

Chart 1: Capacity Ratio of Generation Plants

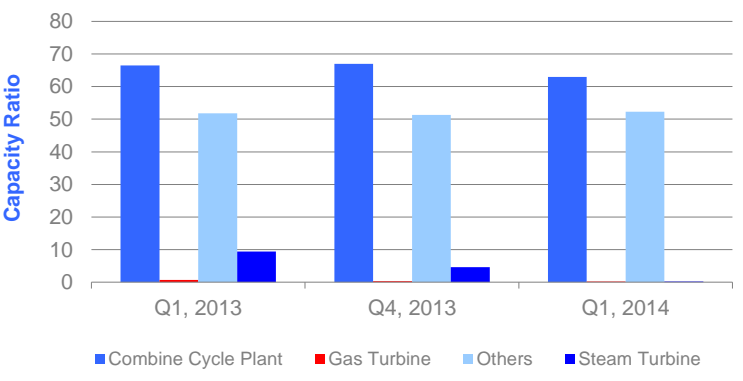


Chart 2: Relationship between USEP and Energy Supply Cushion - Q1 2014

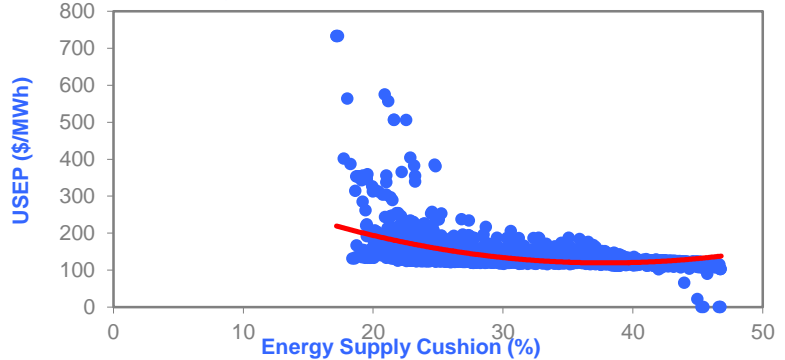


Chart 3: Comparison of Average Market Share by Generation Company Q1 2014

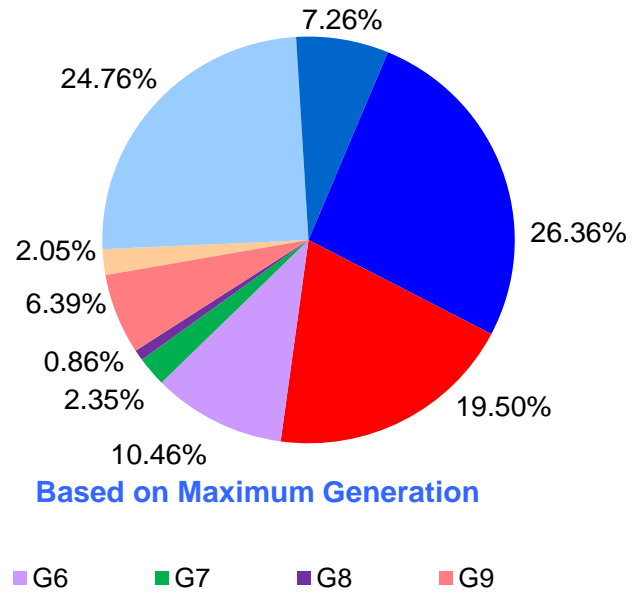
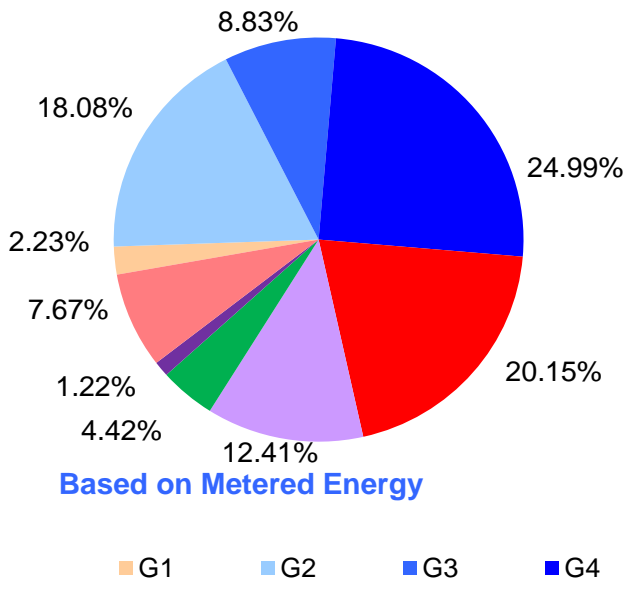
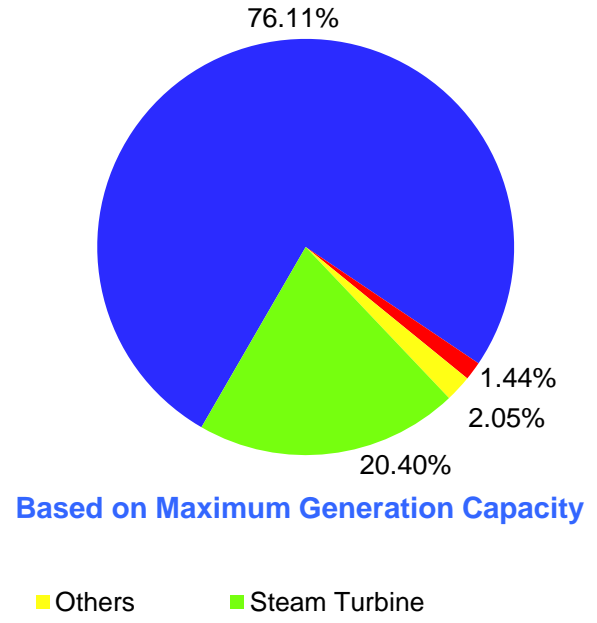
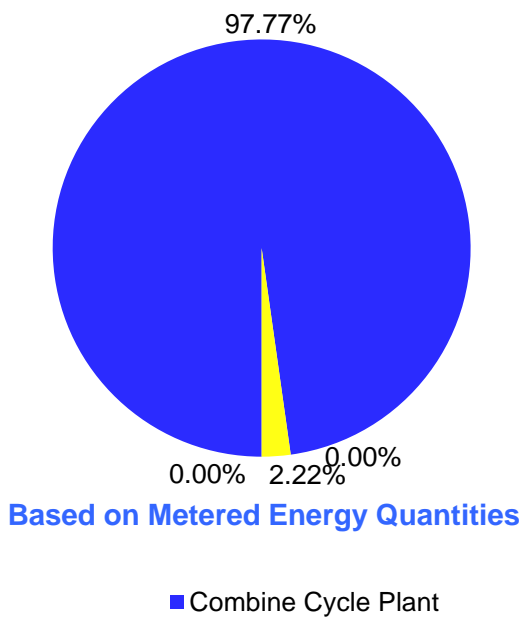


Chart 4: Comparison of Average Market Share by Generation Type Q1 2014



Demand Indicators

Chart 5: Monthly Load Forecast Variation

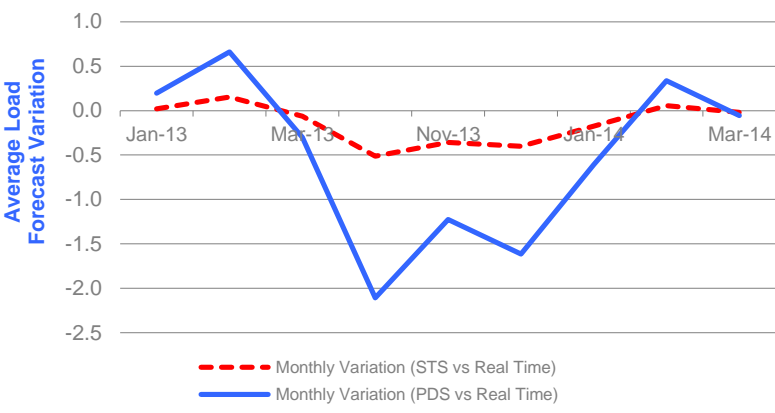
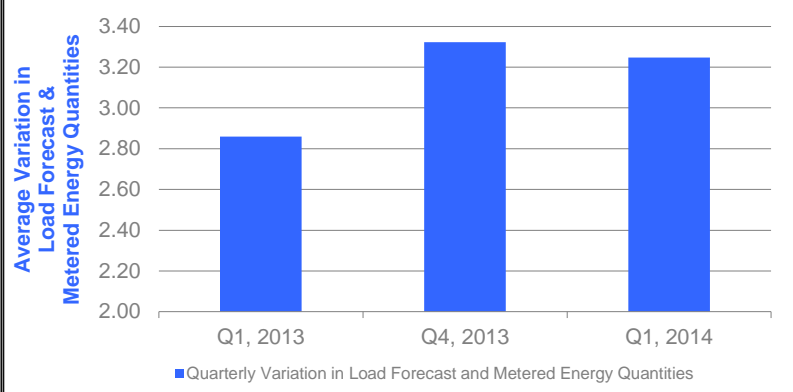


Chart 6: Variation in Real Time Load Forecast & Metered Energy Quantities



Energy Prices

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

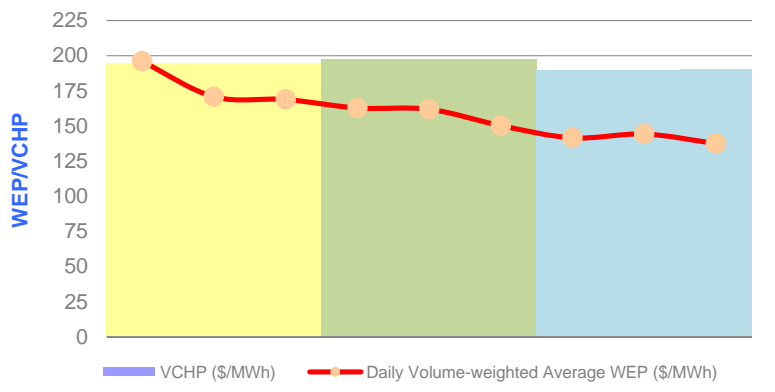


Chart 8: Comparison of Metered Energy Quantities

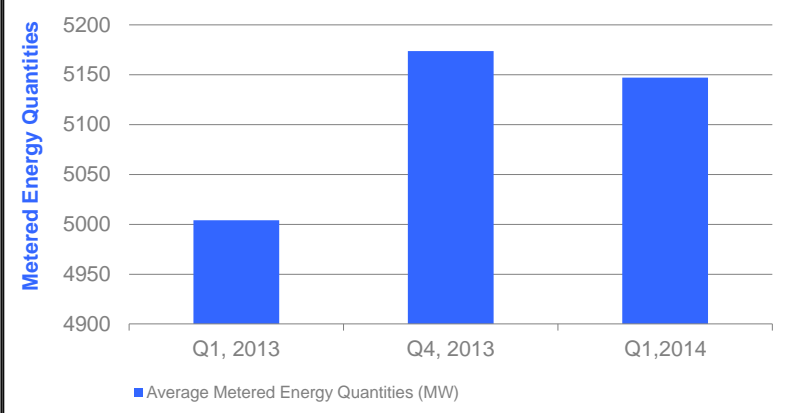


Chart 9: Percentage of Hours when WEP Falls Into a Particular Price Range

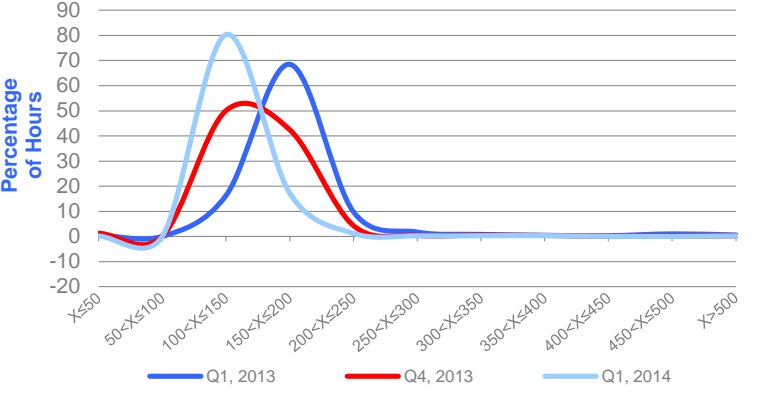


Chart 10: Percentage of Metered Energy Quantities when WEP Falls Into a Particular Price Range

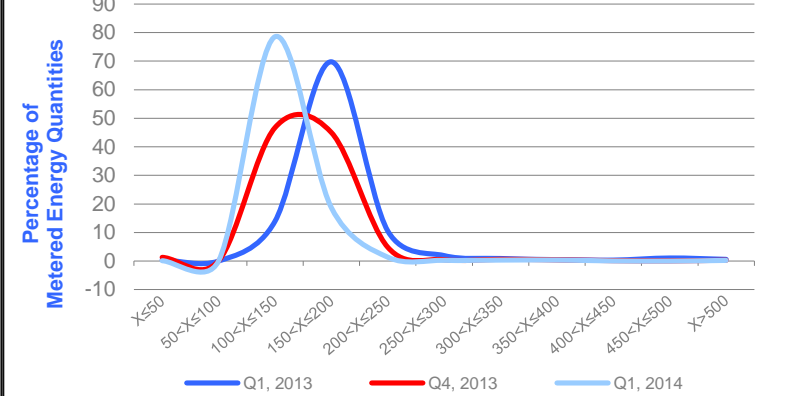


Chart 11: Correlation between WEP & Metered Energy Quantities

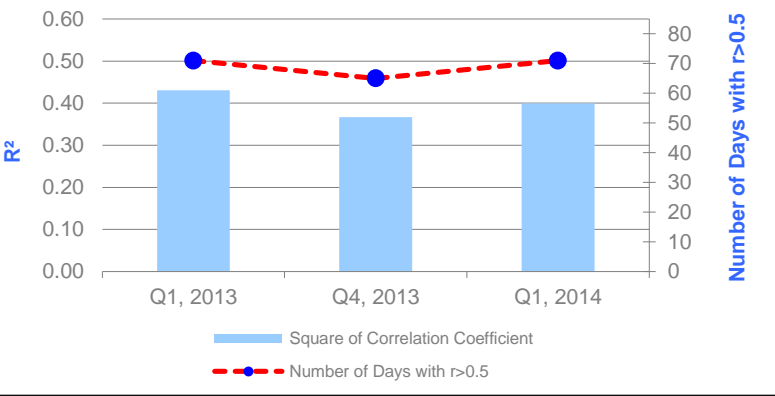
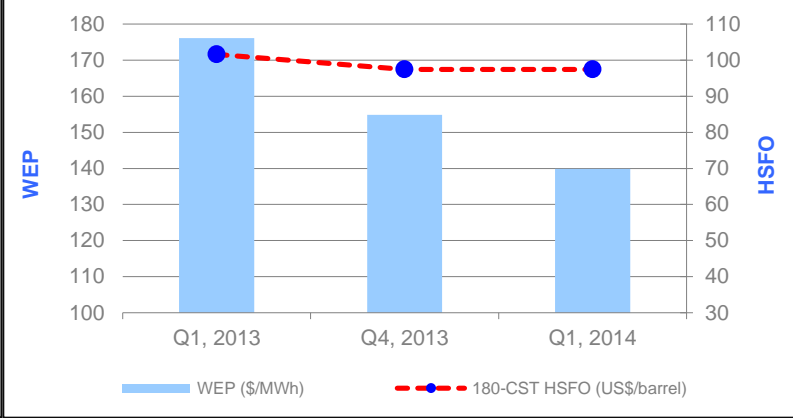


Chart 12: WEP vs Fuel Oil Prices (HSFO)



Ancillary Services Prices

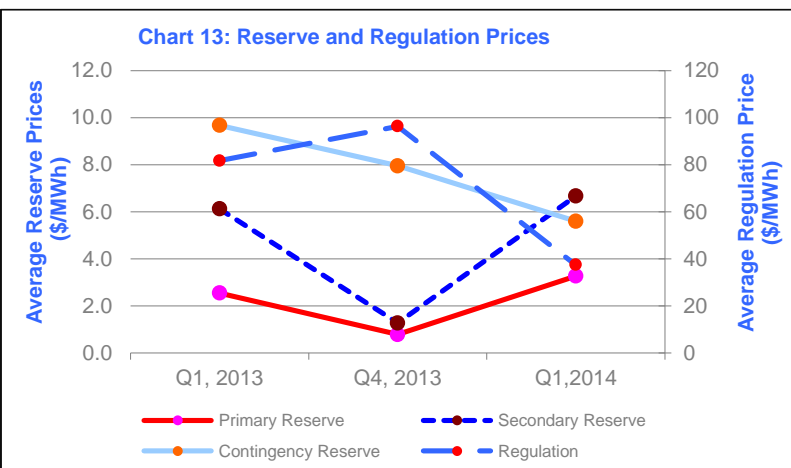


Table 2: Compliance Statistics for Q1 2014

No. of cases of potential rule breaches	185
Self-reports	4
Referrals/Complaints	181
MSCP initiatives	0
No. of determinations	368
Rule breach	0
No rule breach	357
No further action	11
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**