

MSCP Market Watch

Fourth Quarter (Oct-Dec) 2015

Issue 38

Table 1: Indicators of Market Performance

	2014 Q4	2015 Q3	2015 Q4
Price Indicators			
<i>Energy (\$/MWh)</i>			
- USEP	121.55	130.32	61.45
- WEP	121.67	129.47	61.62
- Allocated Vesting Price	188.78	153.67	133.95
- LNG Vesting Price	192.01	157.77	138.73
- Balance Vesting Price	187.30	144.49	127.51
<i>Ancillary Services (\$/MWh)</i>			
- Primary Reserve	1.46	0.02	0.07
- Secondary Reserve	4.61	0.05	0.23
- Contingency Reserve	6.48	11.88	6.37
- Regulation	18.58	14.16	22.13
HSFO Spot (US\$/barrel)	72.35	43.42	35.81
Demand Indicators			
<i>Forecast Demand (MW)</i>			
- Average	5,431	5,660	5,524
- Peak	6,616	6,684	6,656
<i>Metered Energy (MW)</i>			
- Average	5,276	5,561	5,419
- Peak	6,589	6,621	6,578
Supply Indicators			
Average Supply (MW)	7,924	7,906	7,899
Supply Cushion (%)	31.47	28.40	30.03
<i>Capacity Ratio (%)</i>			
- CCGT	61.45	63.92	61.03
- OCGT	0.30	0.45	0.00
- OT	49.52	52.39	52.34
- ST	0.08	0.43	0.14
<i>Total Outages (MWh Cumulative)</i>			
- Planned	1,937,468	2,145,526	1,888,037
- Forced	22,819	17,336	157,675
Offers made at or below \$100/MWh (%)	65.54	73.24	76.17

Market Performance

The Uniform Singapore Energy Price (USEP) decreased 52.85 percent, from \$130.32/MWh in Q3 2015 to \$61.45/MWh in Q4 2015.

By the same token, the Wholesale Electricity Price (WEP) decreased 52.41 percent, from \$129.47/MWh in Q3 2015 to \$61.62/MWh in Q4 2015.

All vesting prices decreased in Q4 2015. The Allocated Vesting Price showed the largest change; it fell 12.83 percent to \$133.95/MWh in Q4 2015.

Prices of all ancillary services, except for contingency reserve, increased in Q4 2015. Secondary reserve had the largest price increase – 334.06 percent to \$0.23/MWh; contingency reserve decreased 46.35 percent to \$6.37/MWh.

The High Sulphur Fuel Oil (HSFO) spot price decreased 17.54 percent from US\$43.42/barrel in Q3 2015 to US\$35.81/barrel in Q4 2015.

Demand contracted 0.66 percent to 5,419MW; supply fell 0.08 percent to 7,899MW. The supply cushion, which measures supply adequacy, increased 1.64 percentage points from 28.40 percent in Q3 2015 to 30.03 percent in Q4 2015.

The capacity ratios of CCGT, OCGT, OT and ST decreased 2.88, 0.45, 0.05 and 0.29 percentage points respectively.

Planned outage volume declined 12.00 percent to 1,888,037MWh in Q4 2015. Forced outage volume rose to 157,675MWh this quarter.

Overall, the percentage of offers made at or below \$100/MWh increased 2.93 percentage points to 76.17 percent in Q4 2015.

The MSCP issued no determination of rule breach in Q4 2015.

Supply Indicators

Chart 1: Capacity Ratio of Generation Plants

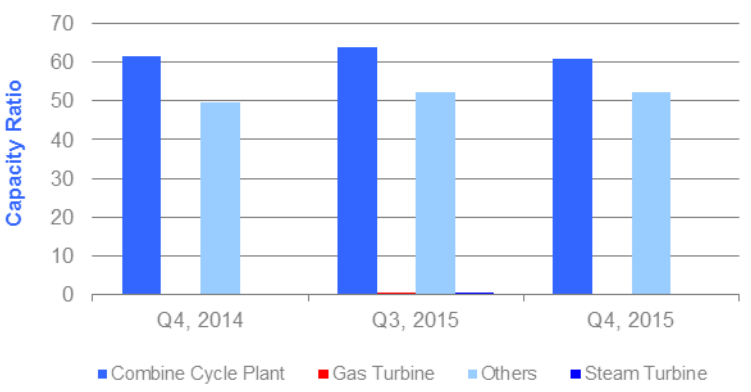


Chart 2: Relationship between USEP and Energy Supply Cushion - Q4 2015

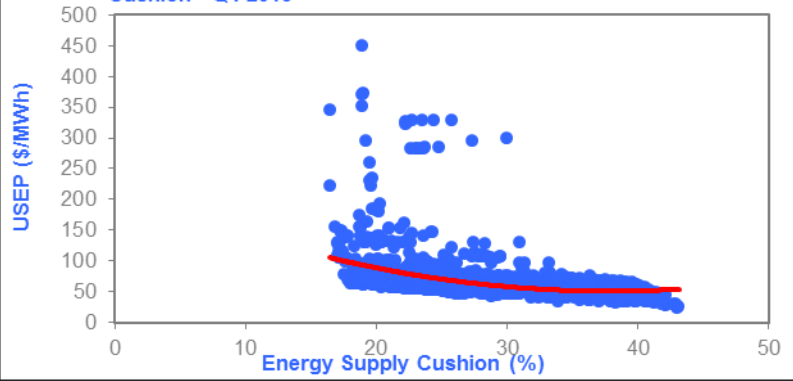


Chart 3: Comparison of Average Market Share by Generation Company Q4 2015

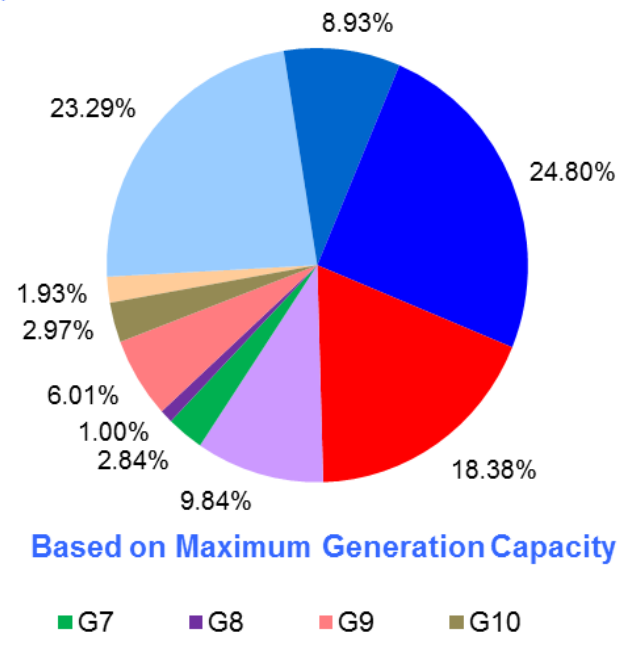
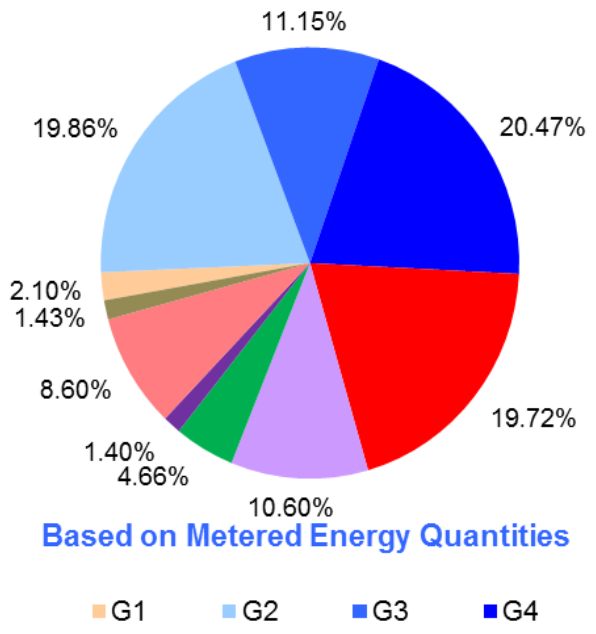
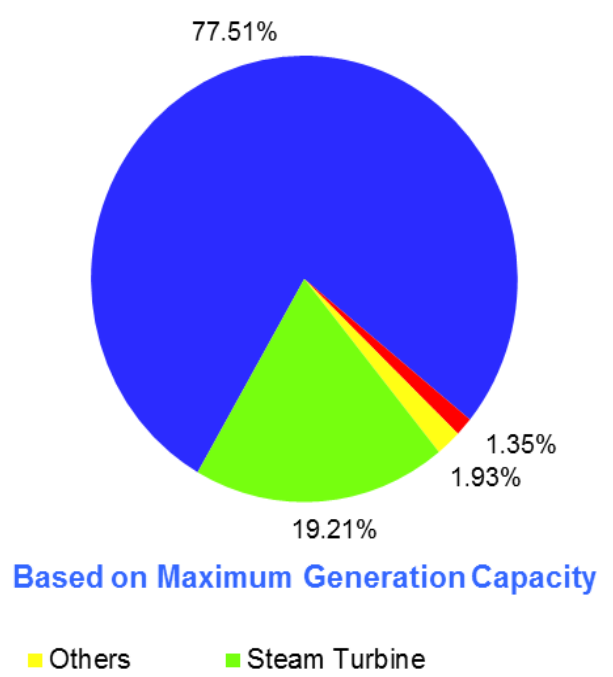
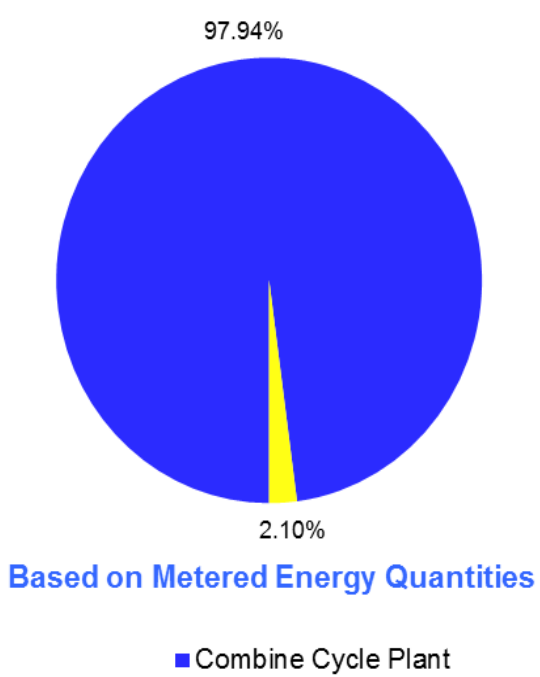


Chart 4: Comparison of Average Market Share by Generation Type Q4 2015



Demand Indicators

Chart 5: Monthly Load Forecast Variation

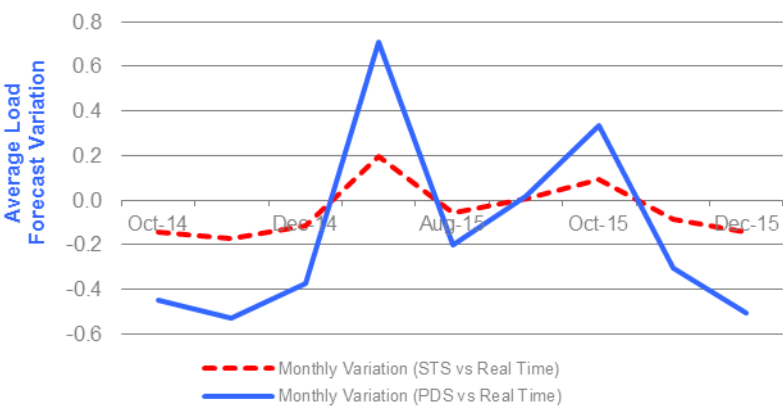
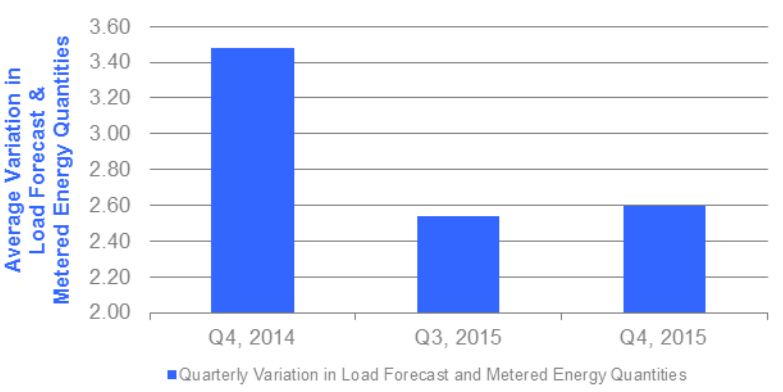


Chart 6: Variation in Real Time Load Forecast & Metered Energy Quantities



Energy Prices

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

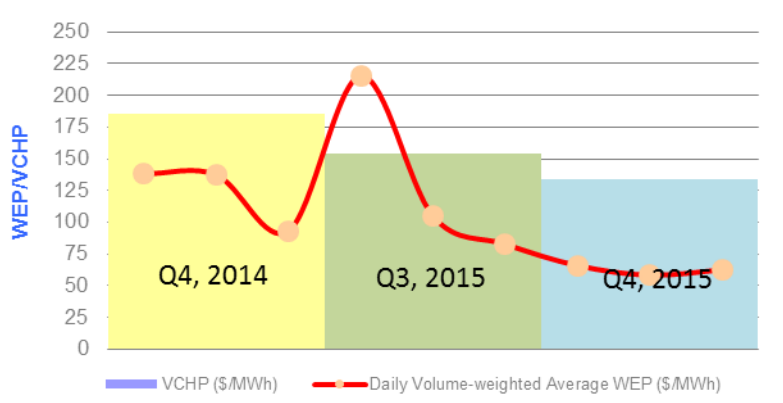


Chart 8: Comparison of Metered Energy Quantities

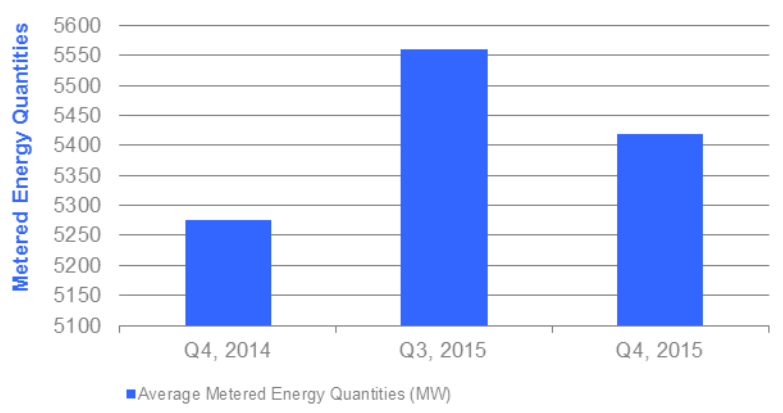


Chart 9: Percentage of Hours when WEP Falls into a Particular Price Range

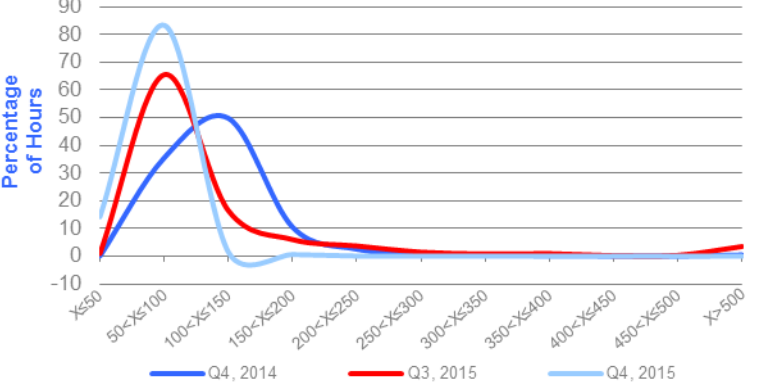


Chart 10: Percentage of Metered Energy Quantities when WEP Falls into a Particular Price Range

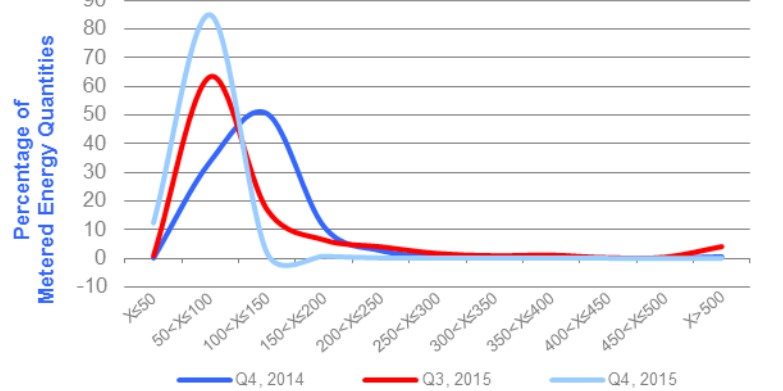


Chart 11: Correlation between WEP & Metered Energy Quantities

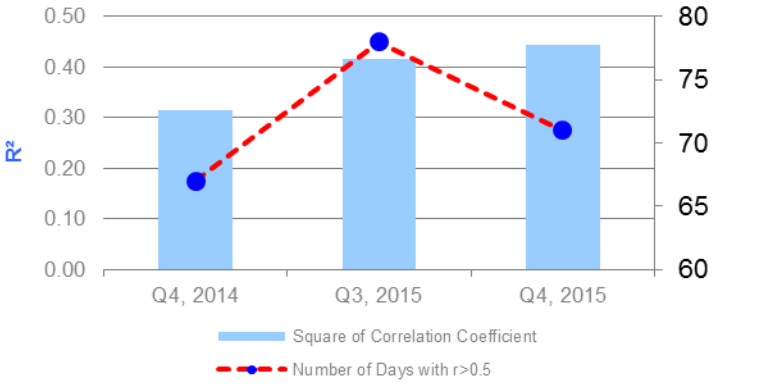
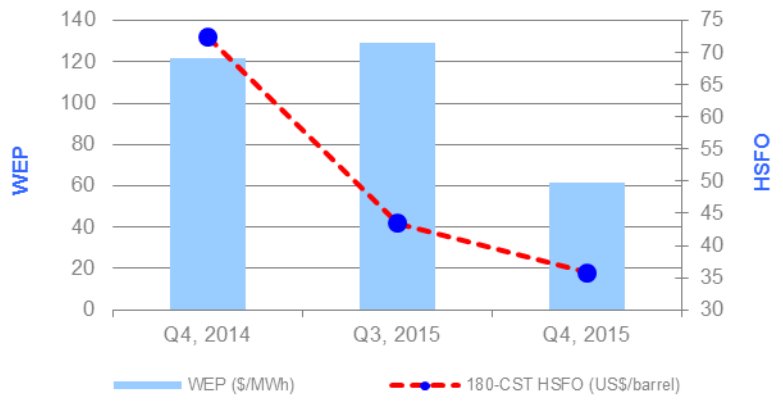


Chart 12: WEP vs Fuel Oil Price (HSFO)



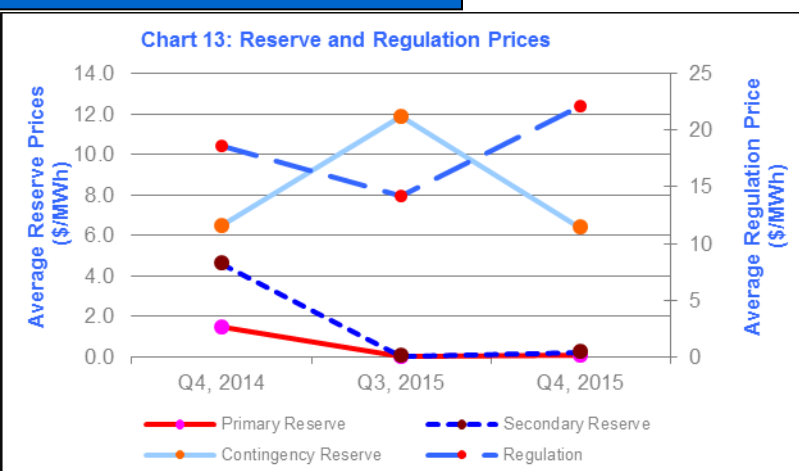


Table 2: Compliance Statistics for Q4 2015

No. of cases of potential rule breaches	107
Self-reports	0
Referrals/Complaints	107
MSCP initiatives	0
No. of determinations	114
Rule breach	0
No rule breach	104
No further action	10
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

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

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

- *TPB Menon, Chair*
- *Lee Keh Sai*
- *Philip Chua*
- *Professor Euston Quah*
- *Professor Walter Woon*

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