

MSCP Market Watch

Second Quarter (Apr-June) 2018

Issue 48

Table 1: Indicators of Market Performance

	2017	2018	
	Q2	Q1	Q2
Price Indicators			
<i>Energy (\$/MWh)</i>			
- USEP	83.10	96.33	108.87
- WEP	83.42	96.60	109.09
- Allocated Vesting Price	145.32	150.65	155.31
- LNG Vesting Price	148.04	154.09	158.57
- Balance Vesting Price	138.48	143.72	147.62
<i>Ancillary Services (\$/MWh)</i>			
- Primary Reserve	0.22	0.33	0.34
- Secondary Reserve	0.86	N.A.*	N.A.*
- Contingency Reserve	8.73	11.38	13.94
- Regulation	12.07	17.35	21.02
HSFO Spot (US\$/barrel)	52.46	64.36	74.50
Demand Indicators			
<i>Forecast Demand (MW)</i>			
- Average	5,762	5,693	5,981
- Peak	6,945	6,789	7,071
<i>Metered Energy (MW)</i>			
- Average	5,688	5,587	5,866
- Peak	6,903	6,739	7,031
Supply Indicators			
Average Supply (MW)	7,997	7,668	7,992
Supply Cushion (%)	27.95	25.76	25.16
<i>Capacity Ratio (%)</i>			
- CCGT	66.37	60.13	63.19
- OCGT	0.03	0.06	0.02
- OT	48.70	49.90	45.67
- ST	0.12	0.11	0.12
<i>Total Outages (MWh Cumulative)</i>			
- Planned	2,319,796	2,796,935	2,443,119
- Forced	30,067	35,212	12,325
Offers made at or below \$100/MWh (%)	76.93	79.25	76.59

Market Performance

The Uniform Singapore Energy Price (USEP) increased 13.01 percent from \$96.33/MWh in Q1 2018 to \$108.87/MWh in Q2 2018. The Wholesale Electricity Price (WEP) also increased 12.93 percent to \$109.09/MWh.

All vesting prices rose. The Allocated Vesting Price went up the most by 3.09 percent to \$155.31/MWh in Q2 2018.

Prices of all ancillary services increased. Contingency reserve price increased 22.50 percent from \$11.38/MWh in Q1 2018 to \$13.94/MWh in Q2 2018.

The High Sulphur Fuel Oil (HSFO) spot price increased 15.76 percent from US\$64.36/barrel in Q1 2018 to US\$74.50/barrel this quarter.

Average demand increased 5.07 percent to 5,981 MW. Average supply also increased 4.24 percent to 7,992 MW. The supply cushion, which measures supply adequacy, dropped 0.60 percentage points from 25.76 percent in Q1 2018 to 25.16 percent in Q2 2018.

In Q2 2018, the capacity ratios of CCGT and ST units increased while those of OCGT and OT units decreased. The capacity ratio of CCGT units increased most by 3.06 percentage points; the capacity ratio of OT units decreased most by 4.23 percentage point.

Planned outage volume dropped 12.65 percent to 2,443,119 MWh in Q2 2018. Forced outage volume declined 65.00 percent to 12,325 MWh.

Overall, the percentage of offers made at or below \$100/MWh decreased 2.66 percentage points to 76.59 percent in Q2 2018.

The Market Surveillance and Compliance Panel (MSCP) issued two rule breach determinations in Q2 2018 against:

- Sembcorp Cogen Pte Ltd for its failure to comply with gate closure rules on 25 January 2018; and
- Energy Market Co Pte Ltd for incorrect settlement components from 31 January to 8 February 2018.

The MSCP also issued a suspension order against Energy Supply Solutions Pte Ltd.

Please note that all figures are rounded off to two decimal places.

* With effect from 1 October 2017, the primary reserve and secondary reserve classes were combined into a new single primary reserve class.

Supply Indicators

Chart 1: Capacity Ratio of Generation Plants

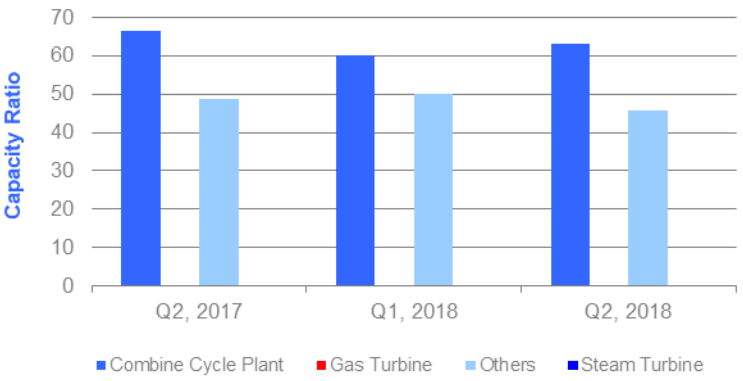


Chart 2: Relationship between USEP and Energy Supply Cushion - Q2 2018

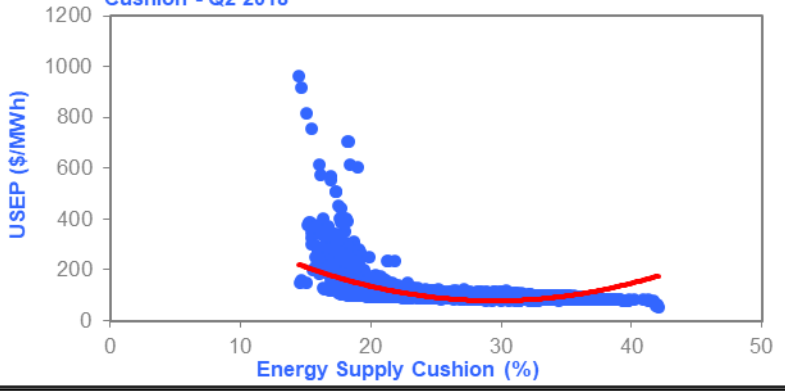
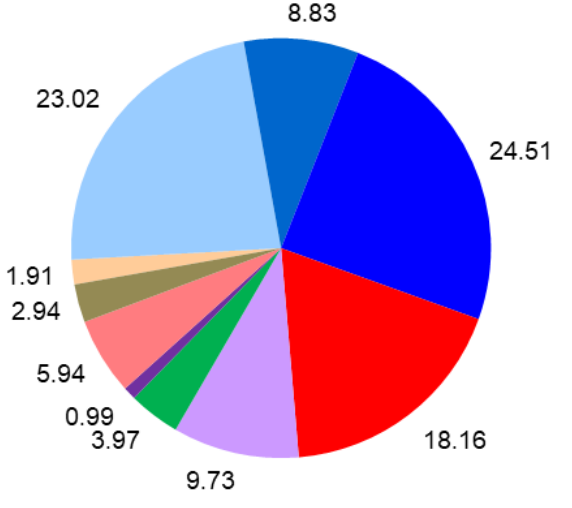
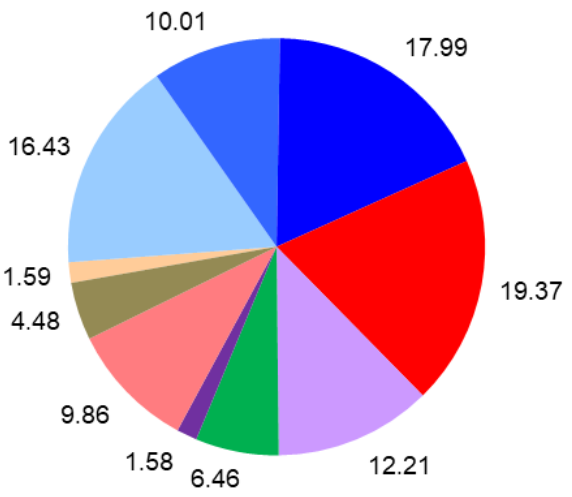


Chart 3: Comparison of Average Market Share by Generation Company Q2 2018

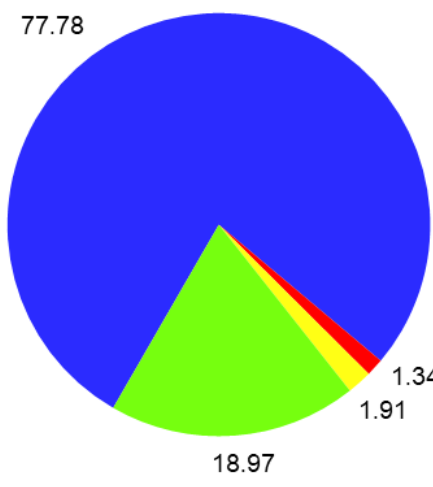
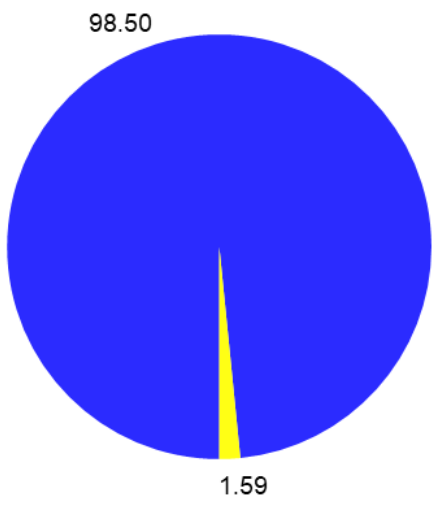


Based on Metered Energy Quantities

Based on Maximum Generation Capacity

- G1
- G2
- G3
- G4
- G5
- G6
- G7
- G8
- G9
- G10

Chart 4: Comparison of Average Market Share by Generation Type Q2 2018

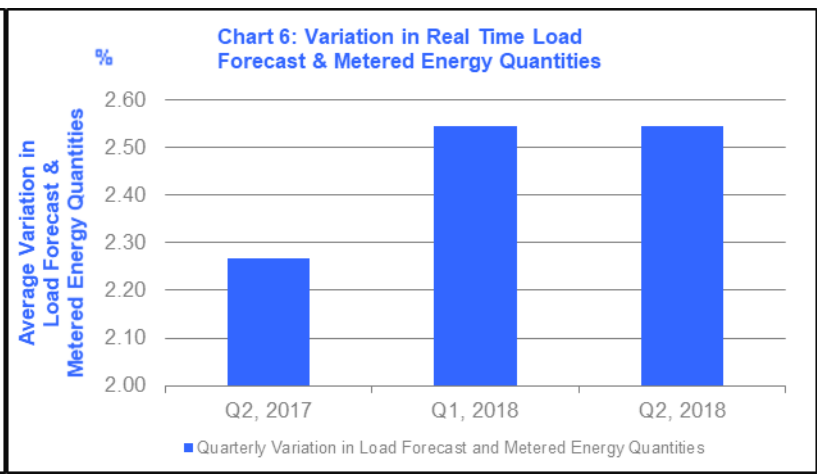
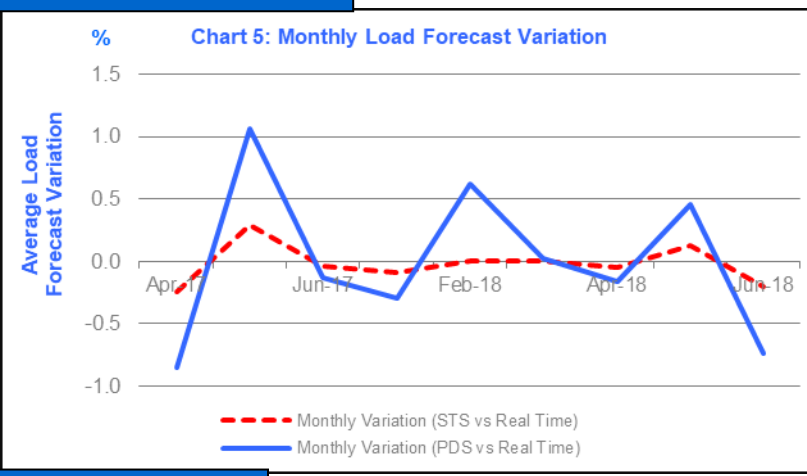


Based on Metered Energy Quantities

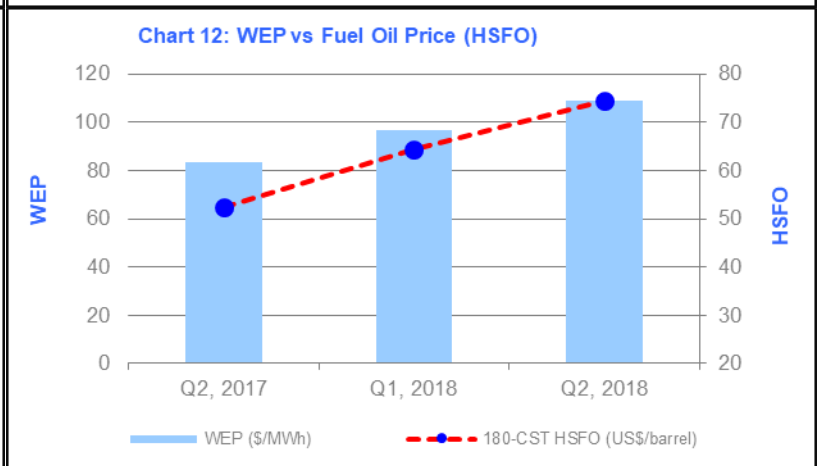
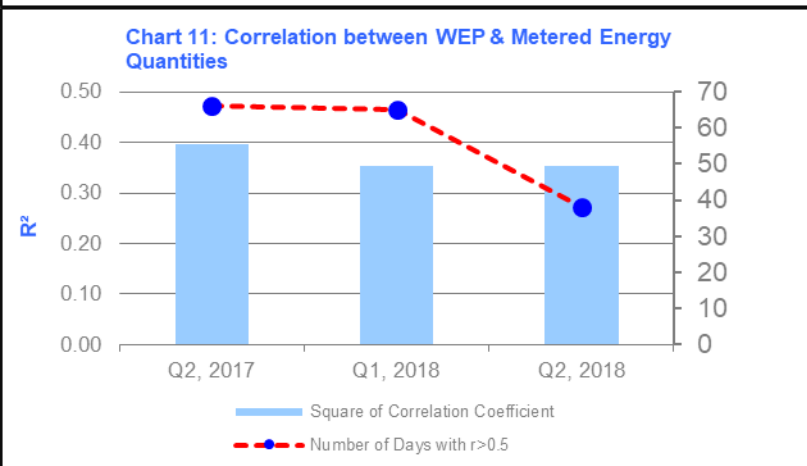
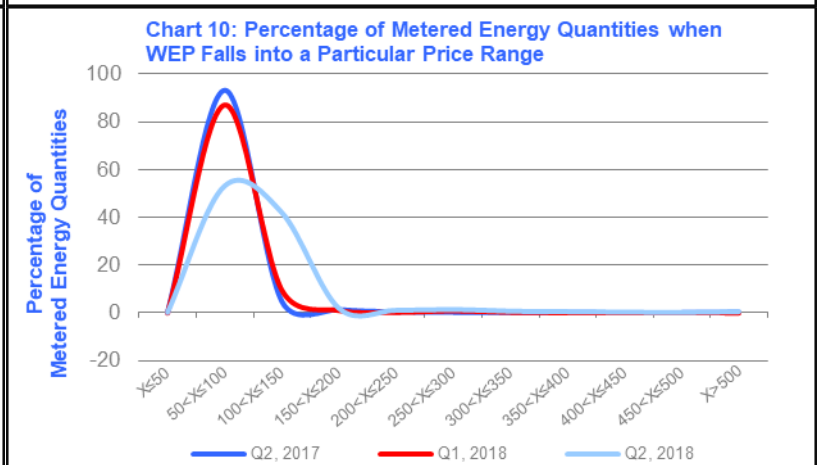
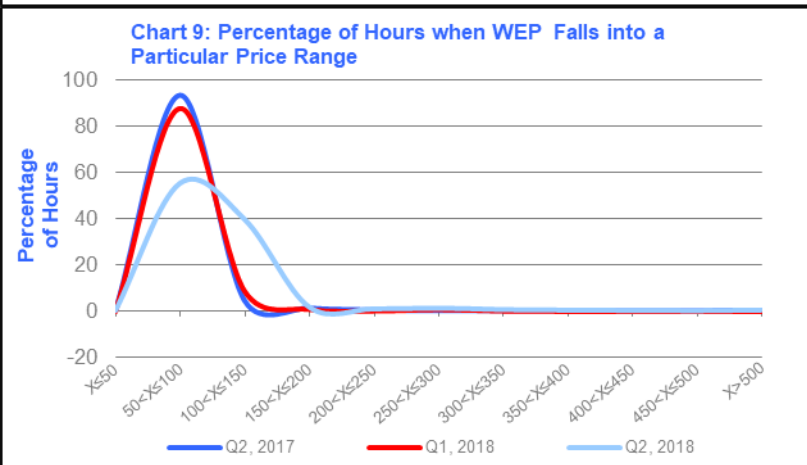
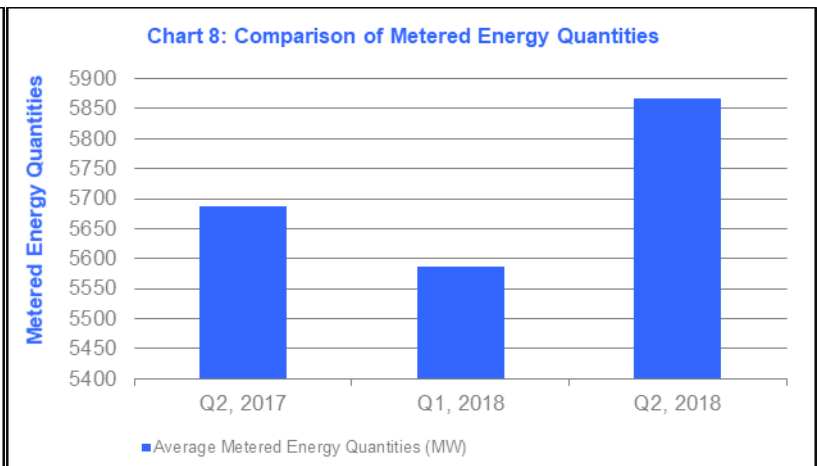
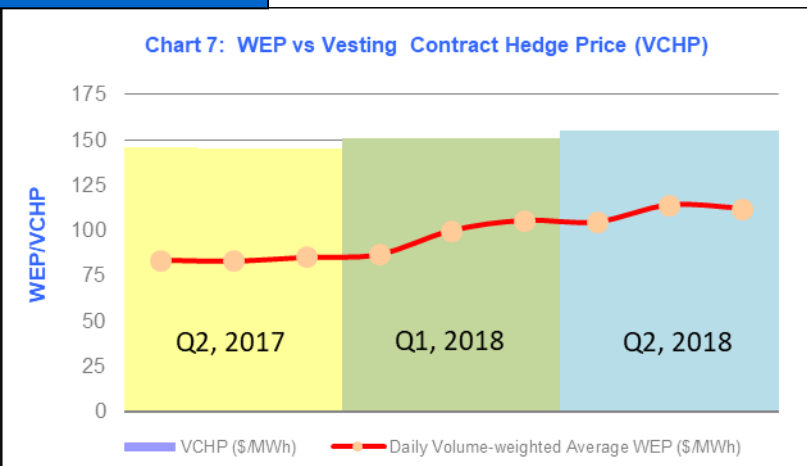
Based on Maximum Generation Capacity

- Combine Cycle Plant
- Gas Turbine
- Others
- Steam Turbine

Demand Indicators



Energy Prices



Ancillary Services Prices

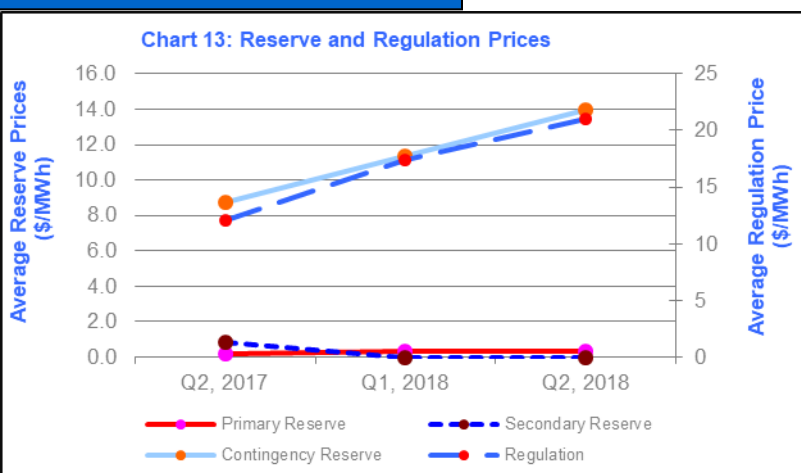


Table 2: Compliance Statistics for Q2 2018

No. of cases of potential rule breaches	121
Self-reports	0
Referrals/Complaints	121
MSCP initiatives	0
No. of determinations	147
Rule breach	3
No rule breach	144
No further action	0
Enforcement	3
No. of cases with enforcement action	
-Financial penalty	2
-Letter of non-compliance	0
-Suspension order	1
Total amount of financial penalties	\$12,500
Total amount of costs	\$6,500

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:

- T P B 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.