

# MSCP Market Watch

First Quarter (Jan-Mar) 2019

Issue 51

Table 1: Indicators of Market Performance

	2018		2019
	Q1	Q4	Q1
<b>Price Indicators</b>			
<i>Energy (\$/MWh)</i>			
- USEP	96.33	122.89	113.76
- WEP	96.60	123.19	114.22
- Allocated Vesting Price	150.65	172.14	168.40
- LNG Vesting Price	154.09	173.88	168.95
- Balance Vesting Price	143.72	166.74	165.17
<i>Ancillary Services (\$/MWh)</i>			
- Primary Reserve	0.33	0.23	0.40
- Contingency Reserve	11.38	20.25	25.73
- Regulation	17.35	25.98	29.60
<i>Fuel Oil Price (US\$/barrel)</i>			
	64.36	76.36	70.19
<b>Demand Indicators</b>			
<i>Forecast Demand (MW)</i>			
- Average	5,693	5,853	5,901
- Peak	6,789	7,046	6,914
<i>Metered Energy (MW)</i>			
- Average	5,587	5,745	5,785
- Peak	6,739	7,019	6,835
<b>Supply Indicators</b>			
<i>Average Supply (MW)</i>			
	7,668	7,769	7,962
<i>Supply Cushion (%)</i>			
	25.76	24.65	25.88
<i>Capacity Ratio (%)</i>			
- CCGT	60.13	61.57	62.07
- OCGT	0.06	0.10	1.05
- OT	49.90	46.76	48.64
- ST	0.11	0.12	0.13
<i>Total Outages (MWh Cumulative)</i>			
- Planned	2,796,935	2,197,866	3,224,784
- Forced	35,212	10,346	118,040
<i>Offers made at or below \$100/MWh (%)</i>			
	79.25	73.23	76.31

## Market Performance

The Uniform Singapore Energy Price (USEP) decreased 7.43 percent from \$122.89/MWh in Q4 2018 to \$113.76/MWh in Q1 2019. By the same token, the Wholesale Electricity Price (WEP) decreased 7.28 percent from \$123.19/MWh in Q4 2018 to \$114.22/MWh in Q1 2019.

All vesting prices declined. The LNG Vesting Price showed the largest decrease – it fell 2.84 percent from \$173.88/MWh in Q4 2018 to \$168.95/MWh in Q1 2019.

Ancillary service prices rose across the board in Q1 2019. Primary reserve price increased 75.97 percent to \$0.40/MWh in Q1 2019.

The fuel oil price dropped 8.08 percent from US\$76.36/barrel in Q4 2018 to US\$70.19/barrel in Q1 2019.

Average demand increased 0.70 percent to 5,785 MW. Average supply increased 2.48 percent to 7,962 MW. The supply cushion, which measures supply adequacy, increased 1.23 percentage points from 24.65 percent in Q4 2018 to 25.88 percent in Q1 2019.

In Q1 2019, the capacity ratios of all generation types increased. The capacity ratio of CCGT and ST units increased 0.49 percent and 0.01 percent respectively.

Planned outage volume went up 46.72 percent to 3,224,784 MWh in Q1 2019. Forced outage volume increased substantially from 10,346 MWh in Q4 2018 to 118,040 MWh in Q1 2019.

Overall, the percentage of offers made at or below \$100/MWh rose 3.08 percentage points to 76.31 percent in Q1 2019.

The Market Surveillance and Compliance Panel (MSCP) issued a determination against Energy Market Company Pte Ltd for failing to determine, release and publish real-time dispatch schedule, short-term schedule and pre-dispatch schedule on 2 October 2018.

# Supply Indicators

Chart 1: Capacity Ratio of Generation Plants

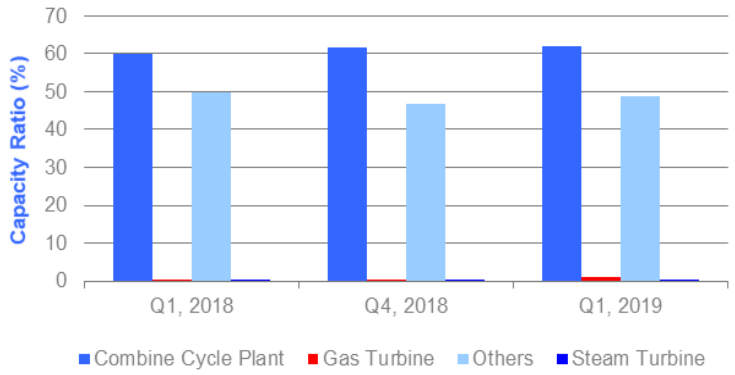


Chart 2: Relationship between USEP and Energy Supply Cushion - Q1 2019

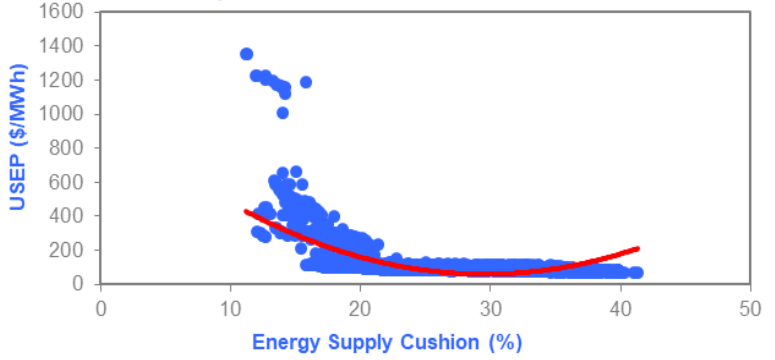


Chart 3: Comparison of Average Market Share by Generation Company Q1 2019

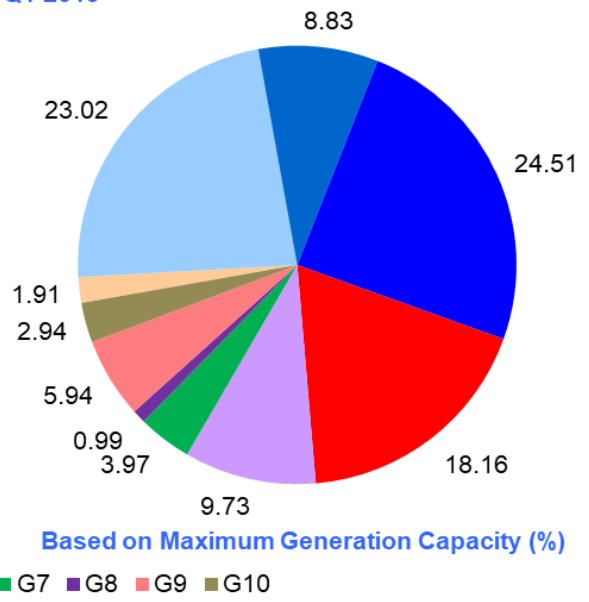
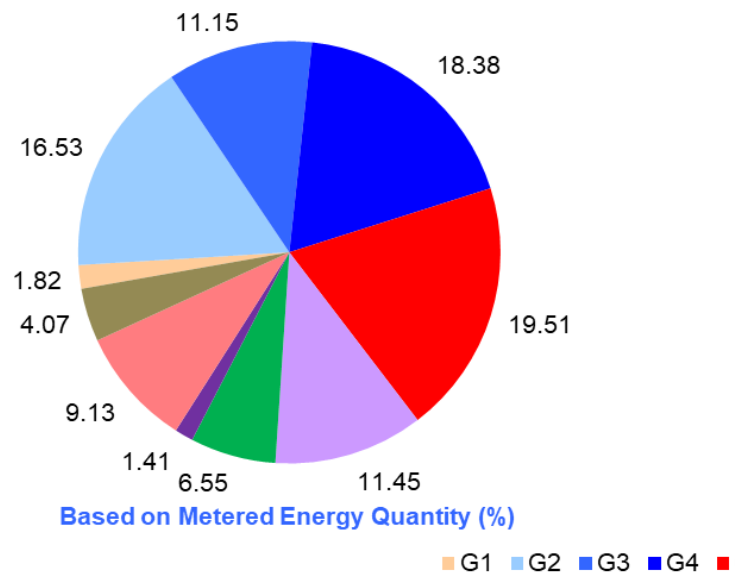
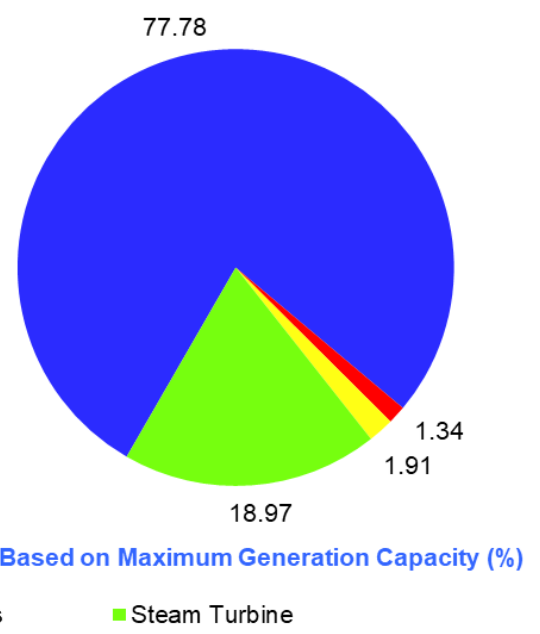
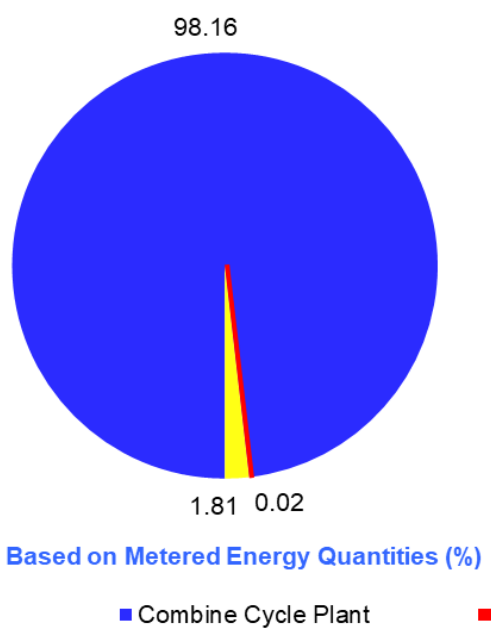


Chart 4: Comparison of Average Market Share by Generation Type Q1 2019



# Demand Indicators

Chart 5: Monthly Load Forecast Variation

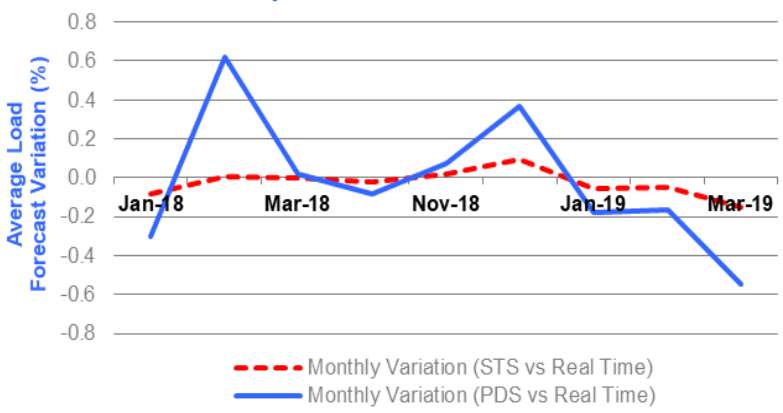
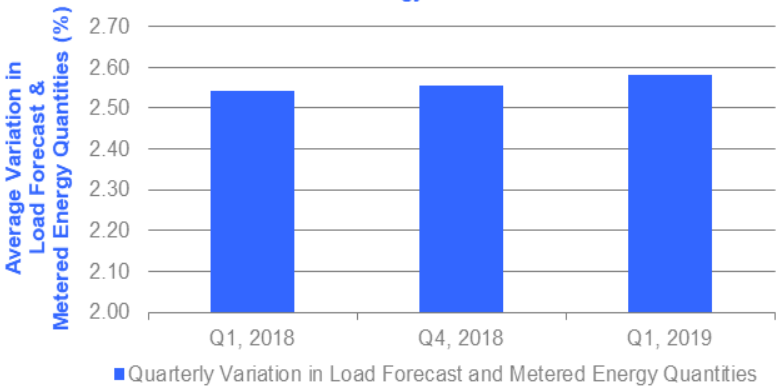


Chart 6: Variation in Real Time Load Forecast & Metered Energy Quantities



# Energy Prices

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

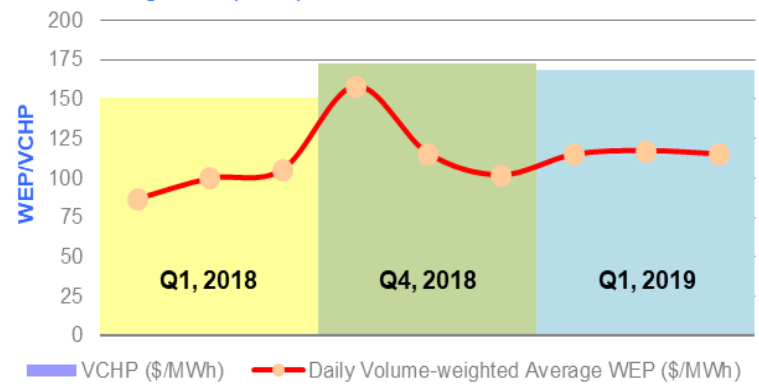


Chart 8: Comparison of Metered Energy Quantities

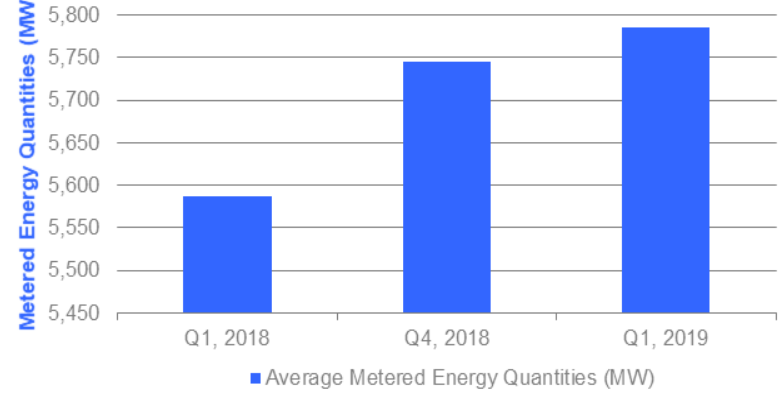


Chart 9: Percentage of Hours when WEP Falls into a Particular Price Range

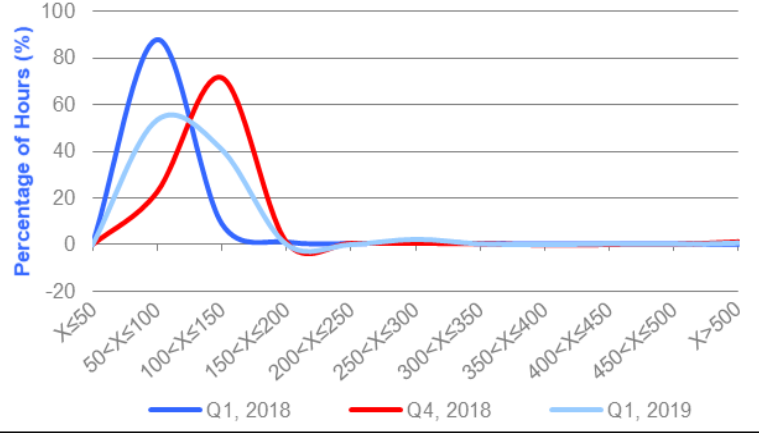


Chart 10: Percentage of Metered Energy Quantities when WEP Falls into a Particular Price Range

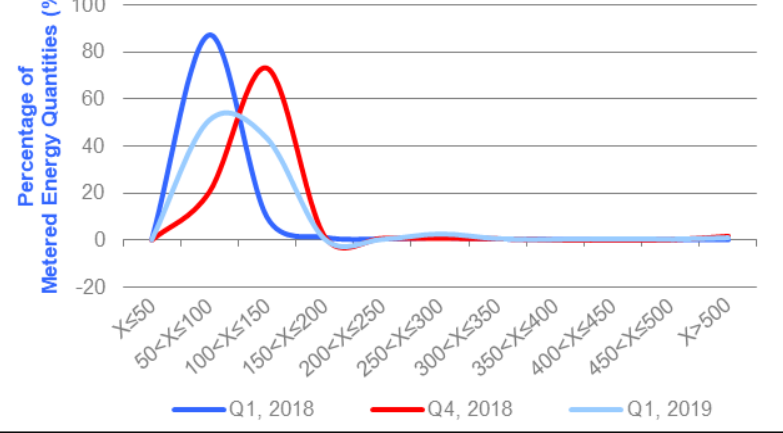


Chart 11: Correlation between WEP & Metered Energy Quantities

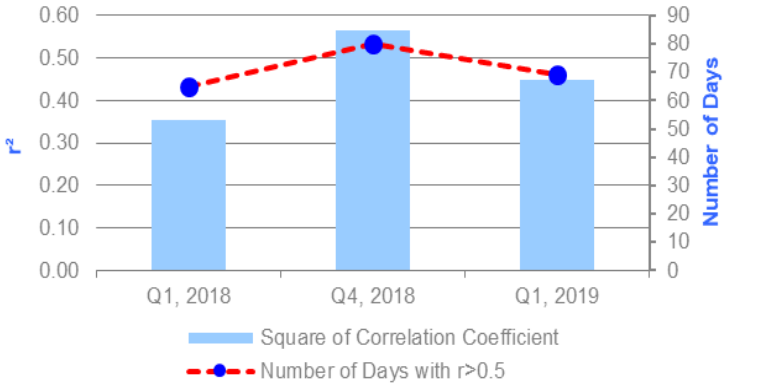
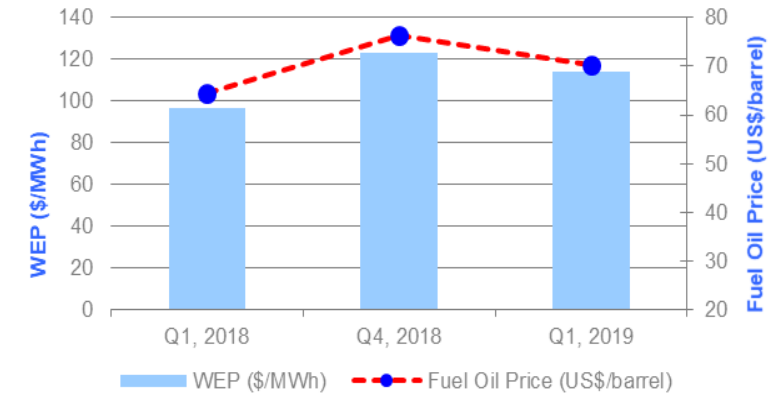
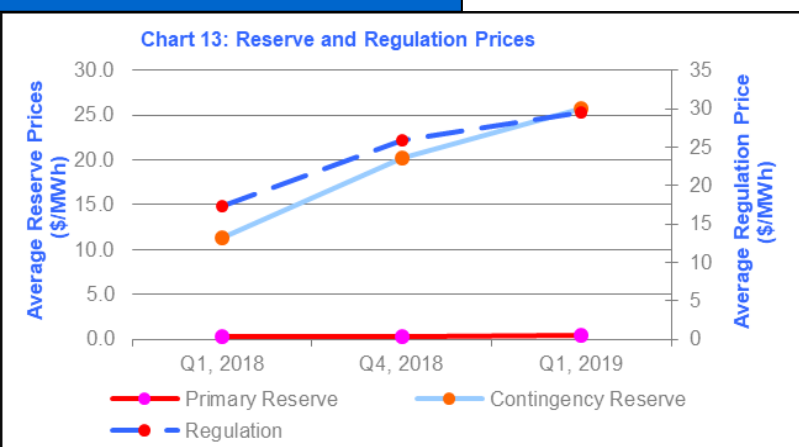


Chart 12: WEP vs Fuel Oil Price





**Table 2: Compliance Statistics for Q1 2019**

<b>No. of cases of potential rule breaches</b>	<b>102</b>
Self-reports	2
Referrals/Complaints	100
MSCP initiatives	0
<b>No. of determinations</b>	<b>121</b>
Rule breach	1
No rule breach	120
No further action	0
<b>Enforcement</b>	<b>1</b>
No. of cases with enforcement action	
- Financial penalty	1
- Letter of non-compliance	0
- Suspension order	0
- Other MSCP order	0
Total amount of financial penalties	\$5,000
Total amount of costs	\$1,500

A User Guide on terms used in this publication is available for download from the Energy Market Company website at [www.emcsq.com](http://www.emcsq.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.