

Market Surveillance & Compliance Panel Market Watch

Issue 79

First Quarter (January to March 2026)

Executive Summary

The Uniform Singapore Energy Price (“USEP”) and the Wholesale Electricity Price (“WEP”) in the National Electricity Market of Singapore (“NEMS”) increased by 22.31% and 22.46% quarter-on-quarter (“QoQ”) to \$137.31/MWh and \$140.56/MWh, respectively. Despite a marginal tightening of the supply cushion by 0.02 percentage point, energy prices rose in the context of a higher proportion of higher-priced energy offers and higher fuel oil costs. Fuel oil prices surged 31.11% from US\$365.66/MT in Q4 2025 to US\$479.41/MT in Q1 2026, during which a global energy crisis was thrust into the spotlight by the geopolitical conflict in the Middle East beginning from 28 February 2026. The frequency of Demand Response (“DR”) activations grew from 52 periods in Q4 2025 to 64 periods in Q1 2026. Similar to Q4 2025, there were no energy shortfalls or Temporary Price Cap (“TPC”) applications in Q1 2026.

On a year-on-year (“YoY”) basis, USEP and WEP increased by 29.73% and 32.59% respectively in Q1 2026, despite a 2.96 percentage points increase in supply cushion. This increase was driven by a greater proportion of higher-priced offers. The frequency of DR activations rose significantly from one period in Q1 2025 to 64 periods in Q1 2026. Although energy prices were slightly volatile in Q1 2026, no energy shortfalls were observed, compared to one instance in Q1 2025 following a forced outage of a large facility. There were no TPC applications in both quarters.

Reserve and regulation prices generally moved in tandem with energy prices on both QoQ and YoY basis. In the current quarter, prices for all ancillary services increased across the board.

For primary reserve, the average price increased to \$6.50/MWh in Q1 2026, from \$2.41/MWh in Q4 2025 and \$1.79/MWh in Q1 2025. On a QoQ basis, offer quantity declined by 8.13% while requirement expanded by 10.02%. On a YoY basis, offer quantity decreased by 1.18% while requirement increased by 8.04%, alongside a higher proportion of higher-priced offers. These QoQ and YoY movements exerted upward pressure on the primary reserve price. No primary reserve shortfalls were recorded across all three quarters.

For contingency reserve, the average price rose by 43.75% QoQ and 296.21% YoY to \$19.37/MWh. On QoQ basis, the offer quantity declined by 1.63% while requirement increased by 2.80%. On a YoY basis, offer quantity expanded by 13.13% while the requirement rose by a small extent of 4.37%. The proportion of higher-priced offers was lower on a QoQ basis but higher on a YoY basis, which explains the larger YoY price increase. The frequency of contingency reserve shortfalls increased to five periods in Q1 2026, from one period in Q4 2025 and three periods in Q1 2025.

Regulation price rose by 15.44% QoQ and 91.41% YoY to \$22.71/MWh in Q1 2026 when the requirement averaged at 102MW, which was a decline of 5.19% QoQ and 6.73% YoY. Offer quantities decreased by 7.39% QoQ and 6.83% YoY. In Q1 2026, while fewer higher-priced offers were observed compared to Q4 2025, the proportion of higher-priced offers was higher compared to Q1 2025. No regulation shortfall occurred in Q1 2026, as compared to three periods in Q4 2025 and none recorded in Q1 2025.

Table 1: Energy and Ancillary Services Prices by Quarter

Quarter	Q1 2025	Q4 2025	Q1 2026
Energy (\$/MWh)			
USEP	105.84	112.27	137.31
WEP	106.01	114.77	140.56
Ancillary Services (\$/MWh)			
Primary Reserve	1.79	2.41	6.50
Contingency Reserve	4.89	13.47	19.37
Regulation	11.86	19.67	22.71

Prices in Q1 2026

From Q4 2025 to Q1 2026, fuel oil price rose significantly by 31.11% to US\$479.41/MT (Chart 1), reflecting the impact of heightened conflict in the Middle East, which exerted upward pressure on the fuel oil prices. The WEP followed a similar trend, increasing by 22.46% to \$140.56/MWh. In contrast, the vesting contract price declined slightly by 0.45% to \$172.80/MWh (Chart 1 and 2). Given that the vesting contract price is partly influenced by fuel cost and that fuel cost component was based on the preceding quarter, the impact of the conflict is yet to be reflected in the current quarter. On a YoY basis, fuel oil price rose 1.60% while the vesting contract price fell by 10.42%. The WEP increased by 32.59%, in line with the fuel oil price movement. This indicates that fuel oil price exerts a stronger influence on WEP than on vesting contract price on both QoQ and YoY basis.

WEP continued to clear below the vesting contract price for the seventh consecutive quarter (Chart 2). The price differential narrowed to \$32.25/MWh in Q1 2026, compared to \$58.81/MWh in Q4 2025 and \$86.90/MWh in Q1 2025. Notably, Q1 2025 had the second widest differential since the introduction of the current five-year vesting regime¹ framework on 1 July 2023. The widest spread occurred in Q3 2024, when WEP cleared \$94.42/MWh below the vesting contract price.

The correlation between WEP and metered energy quantity weakened, with a correlation coefficient r of 0.16 in Q1 2026, compared to 0.18 in Q4 2025 and 0.27 in Q1 2025 (Chart 3). Only six out of 90 days in Q1 2026 recorded r of greater than 0.5, compared to four days in Q4 2025 and 16 days in Q1 2025. The weaker correlation was largely driven by a negative correlation of 0.15 in March, likely due to the elevated WEP in the context of the energy crisis in the Middle East conflict. Prior to this, correlations were positive and stronger at 0.29 and 0.34 in January and February respectively. Notably, a positive correlation between WEP and metered energy quantity was observed on a monthly basis across all three quarters, except in March 2026.

Consistent with the increase in WEP, the distribution of WEP weighted by hours (Chart 4) and by metered energy quantity (Chart 5) shifted towards higher price ranges. For the WEP distribution patterns on QoQ comparison, the peak of WEP distribution shifted from the range between \$50/MWh and \$100/MWh in Q4 2025 to the range between \$100/MWh and \$150/MWh in Q1 2026. While the peak of WEP distribution continued to be within the range between \$100/MWh and \$150/MWh in both Q1 2025 and Q1 2026, the remaining WEP distribution in Q1 2025 was concentrated in the range between \$50/MWh and \$100/MWh. In contrast, the remaining WEP distribution in Q1 2026 was diluted across other price ranges. The second highest proportion of the WEP distribution in Q1 2026 was observed in the range between \$150/MWh and \$200/MWh, accounting for more than 20%, compared to a much smaller proportion of no greater than 5% in each of the other two quarters.

¹ Vesting contracts were introduced by the Energy Market Authority ("EMA") with the objective of curbing the market power of generation companies and providing a cushion to consumers in the event of higher prices. More information are available on [EMA | Vesting Contracts](#).

Chart 1. WEP Versus Fuel Oil Price

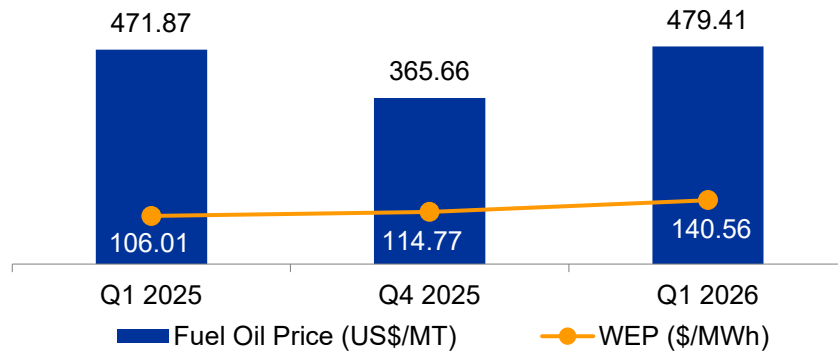


Chart 2. Vesting Contract Price Versus WEP by Quarter

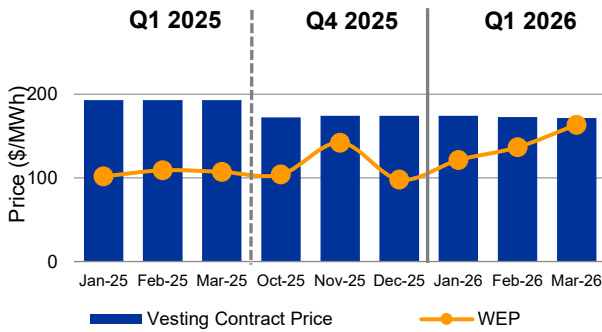


Chart 3. Correlation Between WEP and Metered Energy Quantity

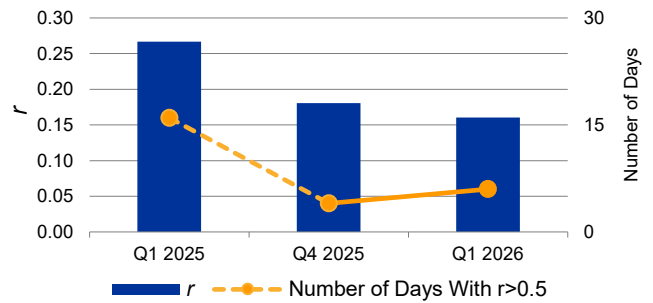


Chart 4: Distribution of WEP over Time

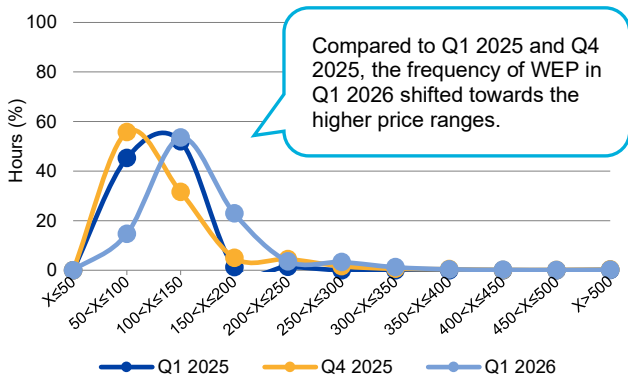
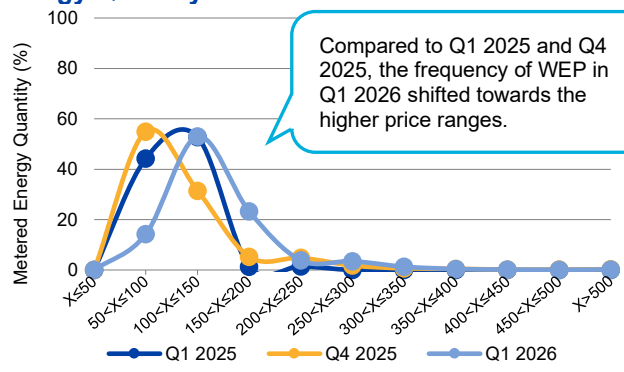


Chart 5: Distribution of WEP over Total Metered Energy Quantity



Demand in Q1 2026

In Q1 2026, the forecast and actual demand averaged 6,487MW and 6,612MW respectively (Chart 6). On a half-hourly basis, the forecast demand is combined with the solar generation forecast to give the gross forecast demand², which averaged at 6,744MW across all half-hourly periods in the quarter.

On a QoQ basis, the average temperature declined slightly by 0.17°C to 28.34°C, accompanied by a 0.40% decline in the gross demand. The reduction in the gross demand was driven by a 1.12% decrease (73MW in absolute terms) in forecast demand, which outweighed a 21.85% increase (46MW in absolute terms) in solar generation forecast. Actual demand reduced by 1.59%. On a half-hourly basis, the peak gross, forecast, and actual demand also declined by 0.47%, 2.68% and 4.09% respectively (Chart 7).

On a YoY basis, the gross demand increased by 4.22% to 6,744MW, driven by a 56.01% increase (92MW in absolute terms) in solar generation forecast and a 2.87% rise (181MW in absolute terms) in forecast demand. This was supported by a 0.34°C increase in temperature, despite slower manufacturing growth this quarter. The average actual demand increased by 3.33% as well. On a half-hourly basis, the peak gross, forecast and actual demand strengthened by 4.57%, 3.54% and 3.66% respectively.

In terms of the forecast demand and solar generation periodic profiles (Chart 8), the occurrence of highest average forecast demand shifted from Period 40 of Q1 2025 at 6,901MW, to Period 39 of Q4 2025 at 7,233MW, and subsequently back to Period 40 in Q1 2026 at 7,202MW. The highest average solar generation forecast was recorded in Period 27 of Q1 2025 at 580MW, in Period 27 of Q4 2025 at 745MW, and peaked further in Period 26 of Q1 2026 at 889MW. During the mid-day periods, the solar forecast generation increased progressively across all three quarter. This mid-day effect was most pronounced in this quarter, when mid-day forecast demand was the lowest levels among all quarters, reflecting the growing impact of solar generation on demand profiles.

Chart 6. Average Forecast and Actual Demand Versus Average Temperature

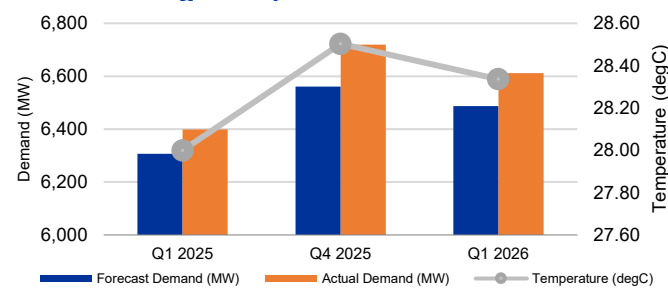


Chart 7. Peak Forecast and Actual Demand

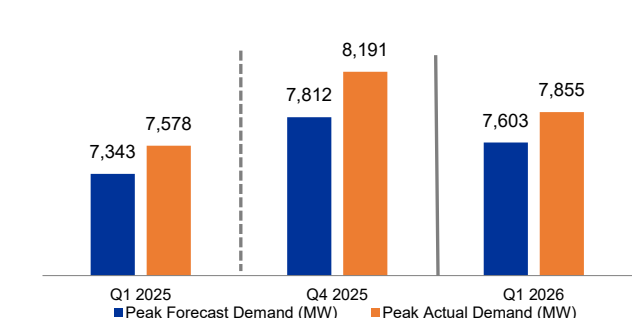
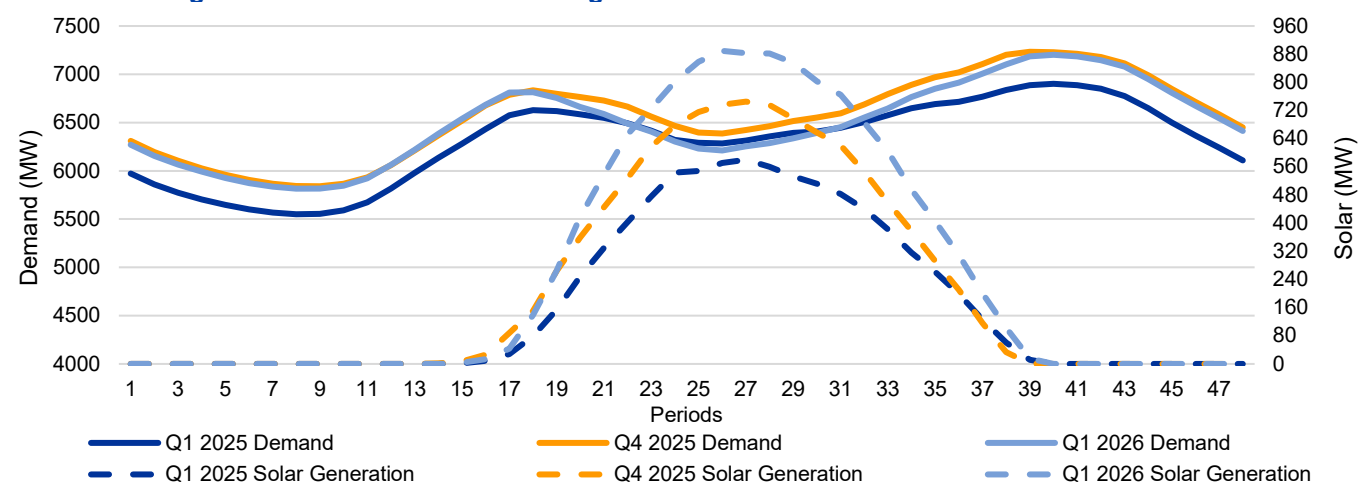


Chart 8. Average Forecast Demand and Average Solar Generation Forecast Periodic Profiles



² On a half-hourly basis, the solar generation forecast is offset against the gross forecast demand to give the net forecast demand, which is the forecast demand used by the market clearing engine to produce the dispatch schedules. The forecast demand in the market refers to the net demand, unless otherwise specified.

Chart 9 illustrates the variations in the load forecast used in the Pre-dispatch Schedule (PDS) and Short-term Schedule (STS) against the Real-time Schedule (RTS), as provided by the Power System Operator. As the STS is updated more frequently and closer to the real-time dispatch period, it typically exhibits smaller load variations from the real-time dispatch schedule than the PDS.

The quarterly average load variation between the RTS and the PDS, in absolute terms, increased to 0.58% in Q1 2026, from 0.20% in Q4 2025 and 0.48% in Q1 2025. At the monthly level, the load was averagely under-forecasted in the PDS for all the months for the three quarters. The variations remained below 1% in all months with the exception of February 2026. The higher deviation in February contributed significantly to the elevated quarterly average load variation observed in Q1 2026, and was driven by under-forecasting for 24 out of 28 days during the month, compared to 21 out of 31 days in January and 15 out of 31 days in March.

On both QoQ and YoY comparisons, in absolute terms, the quarterly average load variation between the RTS and the STS increased to 0.11% in Q1 2026, compared with 0.05% in Q4 2025 and 0.06% in Q1 2025. At the monthly level, the load continued to be averagely under-forecasted in the STS throughout Q1 2026, with the RTS averaging higher than the STS by up to 0.25% across the three months. In contrast, the load was averagely over-forecasted in the STS at the monthly level in Q4 2025, and was over-forecasted in the STS in one of the three months in Q1 2025.

Chart 10 shows the variation between the load forecast in the RTS and the metered energy quantity, in absolute terms. Q1 2026 registered a quarterly variation of 1.90%, which was a decline from 2.07% in Q4 2025 but an increase from 0.63% in Q1 2025. At the monthly level, the range of variation in Q1 2026 narrowed on a QoQ basis, but widened on a YoY basis. The monthly variation in Q1 2026 ranged between 1.61% and 2.18%, compared with a wider range of 1.21% to 2.82% in Q4 2025, and a significantly lower range of 0.02% to 1.21% in Q1 2025.

Chart 9. Monthly Average Variation³ in Load Forecast

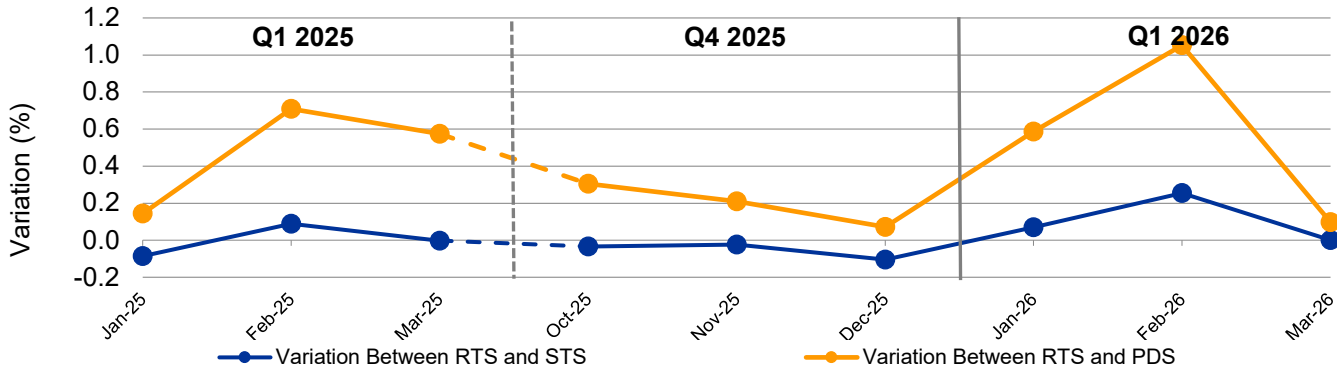
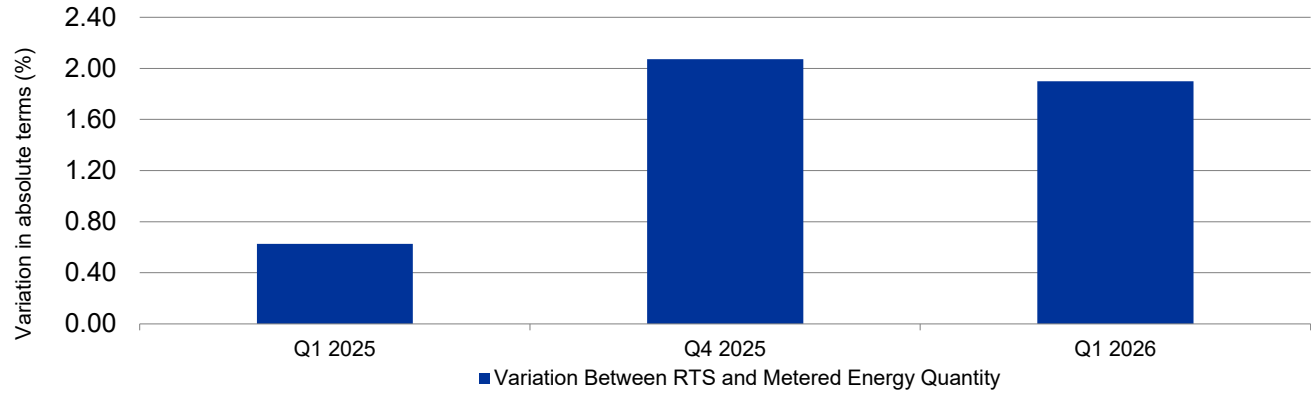


Chart 10. Quarterly Average Variation⁴ Between Real-Time Dispatch Schedule and Metered Energy Quantity



³ A positive variation in the load forecast indicates that the load forecast in the RTS is higher than the load forecast in the PDS/STS, and vice-versa.

⁴ The metered energy quantity reflects the actual demand, while the load forecast in the RTS reflects the system demand including the station and auxiliary loads. This difference in methodology creates a variation between the RTS and the metered energy quantity, with the former being higher than the latter for the same trading period.

Supply and Supply Cushion in Q1 2026

Table 2 shows the total supply⁵ and supply cushion tightened slightly on QoQ basis. Compared to Q4 2025, the demand declined by 1.12% while supply fell by 1.04% to 8,022MW, reducing the supply cushion by 0.02 percentage point to 19.08%. Reflecting the lower supply, the decrease in forced outage level outpaced a smaller increase in planned outage level by magnitude, dragging the total outage level down from Q4 2025. In line with a 31.11% higher fuel oil price, the proportion of energy offers priced above \$200/MWh increased by 0.39 percentage point to 13.52% (Chart 11). Despite a slight tightening in supply cushion this quarter, the USEP rose significantly by 22.31% to \$137.31/MWh (Chart 12), reflecting the higher fuel cost and a greater proportion of higher-priced offers in the current volatile geopolitical landscape. While supply cushion and USEP generally move in opposite directions, this relationship did not hold in March when the USEP was relatively high in spite of an improved supply cushion, as the impact of higher fuel cost from geopolitical conflict overshadowed the standard market dynamics. On a periodic level, USEP exceeded \$1,000/MWh for one period in Q1 2026, compared to four periods in Q4 2025. The spike in Q1 2026 coincided with a higher maintenance level and a reduced supply cushion at 6.56% on that day.

The frequency of DR activations rose from 52 periods in Q4 2025 to 64 periods in Q1 2026 (Chart 13), occurring alongside a rise in the number of DR energy bids from 178 bids in Q4 2025 to 258 bids in Q1 2026. However, the frequency of USEP clearing above the energy bid price⁶ dipped from 52 periods in Q4 2025 to 47 periods in Q1 2026 among the periods with DR energy bids. The spread between the average counterfactual USEP (“CUSEP”)⁷ and the USEP (or reference USEP, “RUSEP”⁸, for the periods when TPC was applied) narrowed from \$23.42/MWh in Q4 2025 to \$6.92/MWh in Q1 2026, indicating that with each MW of consumption, consumers benefitted less from the lower estimated average cost savings for each MW of consumption.

Compared to Q1 2025, supply increased by 6.77%, outpacing demand growth of 2.87%, thereby raising the supply cushion by 2.96 percentage points. The fuel oil price rose by 1.60%, and energy offers became more concentrated in the higher price bands, particularly those priced above \$500/MWh. The proportion of energy offers priced below \$200/MWh fell by 3.61 percentage points, with the decline most pronounced in March 2026 compared to March 2025. As a result, the USEP averaged 29.73% higher in the quarter. At the periodic level, the number of periods in which the USEP exceeded \$1,000/MWh remained at one for both quarters.

DR activations increased significantly YoY, from one period in Q1 2025 to 64 periods in Q1 2026, as the number of DR energy bids surged from 17 to 258. At the same time, out of the periods with DR energy bids, there were 47 periods in Q1 2026 when the USEP cleared above the energy bid price, compared to one period in Q1 2025. The USEP reduction arising from DR was set back from \$10.45/MWh in Q1 2025 to \$6.92/MWh in Q1 2026.

There were no TPC applications across all three quarters.

Table 2. Total Outage, Quarterly Average Supply and Supply Cushion

Quarter	Q1 2025	Q4 2025	Q1 2026
Outage (MW)			
Average Planned Outage	898.27	1,085.24	1134.69
Average Forced Outage	7.18	156.12	59.12
Supply (MW)			
Average Supply	7,513	8,107	8,022
Supply Cushion (%)	16.12	19.10	19.08

⁵ With effect from 19 September 2025, the modelling of Energy Storage Systems (ESS) facilities has been enhanced to better reflect their physical capabilities, such that their energy offers can be positive and negative to indicate their willingness to discharge and charge respectively, and that ESS facilities can be scheduled to either charge or discharge. Due to this bi-directional characteristic, the definition of total supply in the NEMS has been revised to exclude ESS supply.

⁶ For each period with DR energy bid(s), the USEP is compared with the lowest energy bid price offered in that period.

⁷ The counterfactual USEP (“CUSEP”) is calculated by the market clearing engine (“MCE”) with the assumption that there are no dispatchable energy bids.

⁸ The Reference USEP (“RUSEP”) is the uncapped counterfactual USEP when the Temporary Price Cap (“TPC”) is in effect.

Chart 11. Trend Of Energy Offer Price Proportion

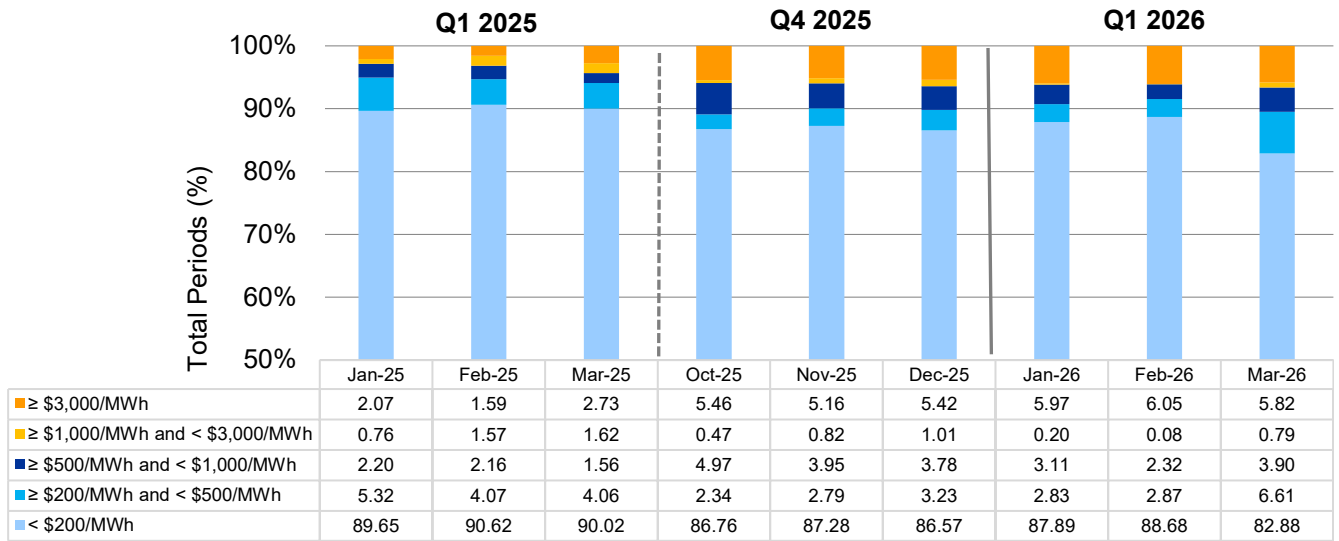


Chart 12. USEP and Supply Cushion

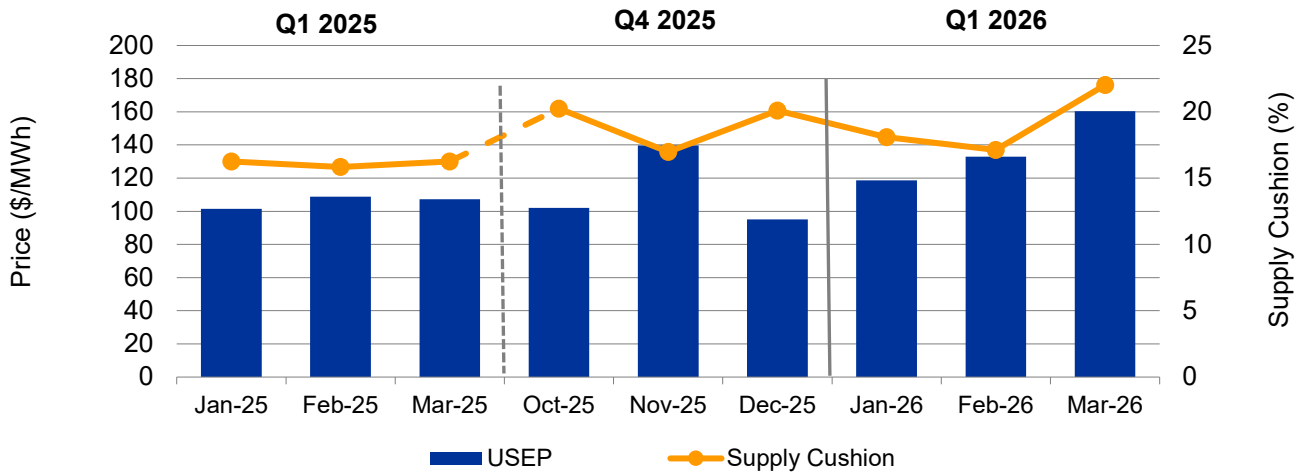
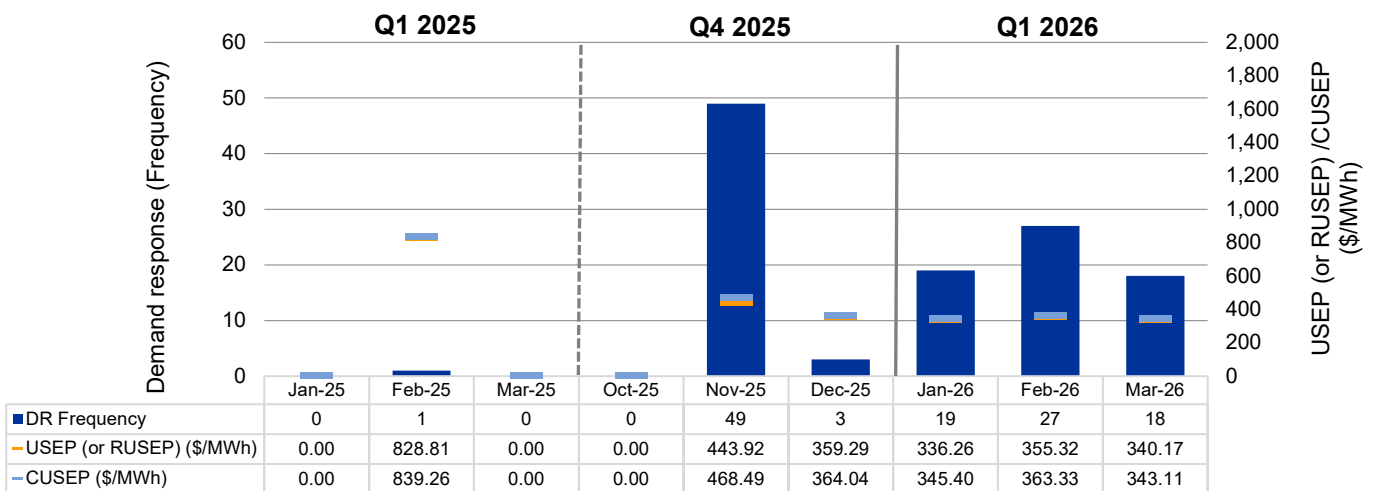


Chart 13. Demand Response Activations⁹



⁹ The frequency of Demand Response ("DR") activations, and the associated average USEP (or RUSEP) and CUSEP during those periods with DR activations.

Compared to Q4 2025, the capacity ratios for Combined-Cycle Gas Turbine (“CCGT”), Other Turbines (“OT”) and Steam Turbine (“ST”) generation types dropped in Q1 2026 (Chart 14). CCGT recorded the largest reduction in the capacity ratio. This was driven by a larger decrease in its scheduled generation against a smaller increase in its maximum generation capacity. The decline in scheduled generation from CCGT was largely taken up by increased scheduled generation from Open-Cycle Gas Turbine (“OCGT”), Electricity Imports (“Import”) and Energy Storage System (“ESS”), which revealed higher capacity ratios correspondingly this quarter.

On a YoY basis, capacity ratios were higher for all generation types compared with Q1 2025, with the exception of CCGT and OCGT registering slight decline in their respective capacity ratios.

Chart 14. Capacity Ratio by Generation Type¹⁰

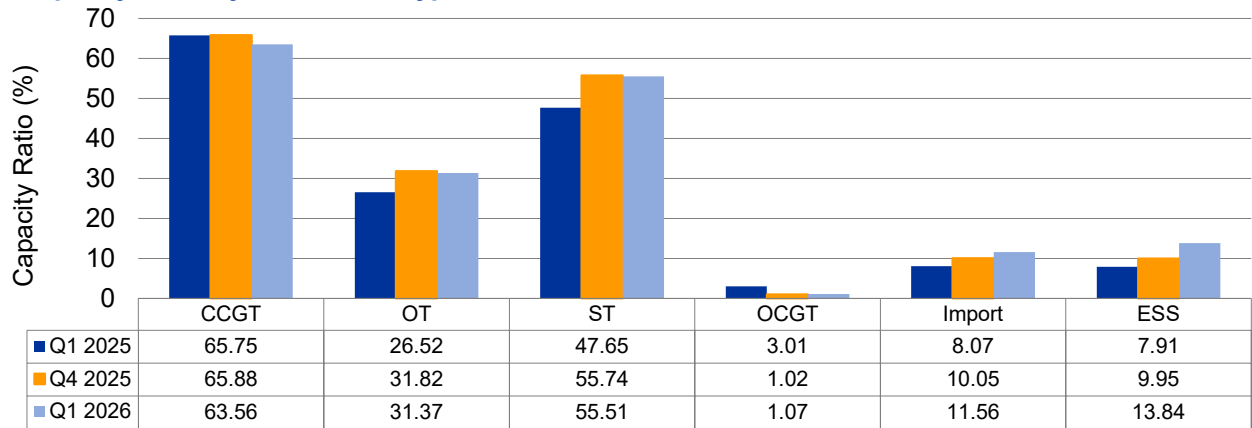
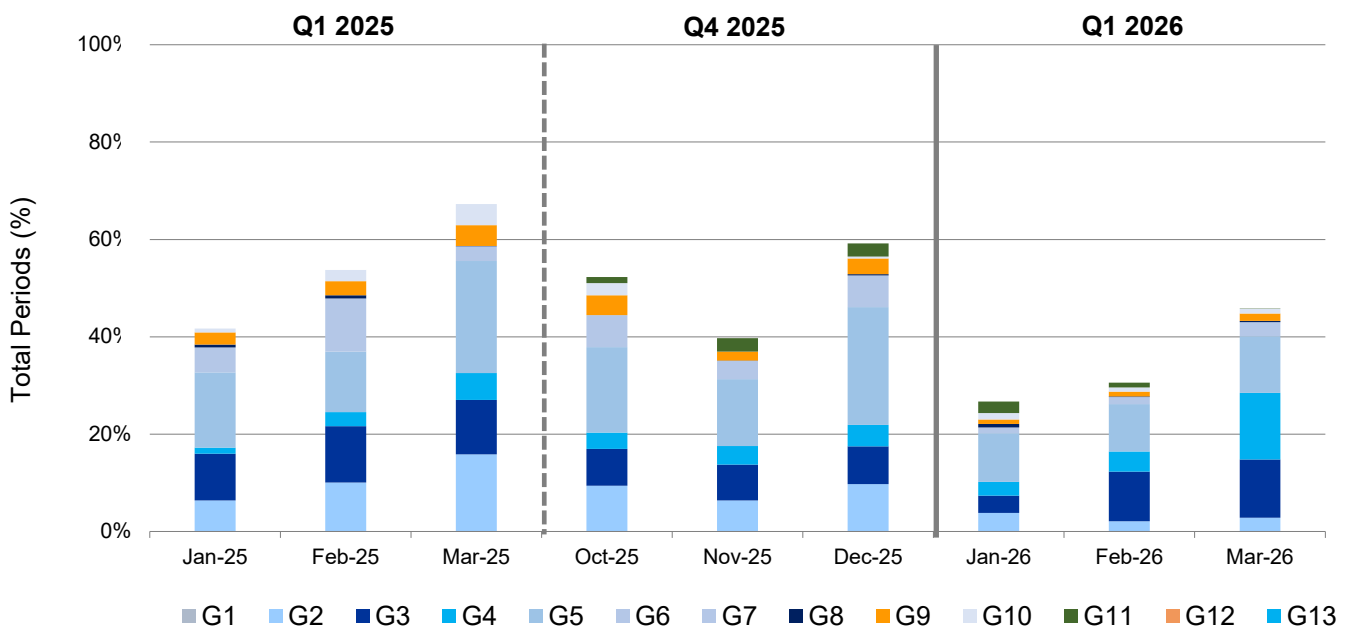


Chart 15 shows the monthly breakdown of price-setting generation companies. In Q1 2026, G5 was the most frequent price setter, accounting for 30.34% of periods with a price setter. This was followed by G3 and G4 which accounted for 24.70% and 20.27% of price-setting periods respectively. Compared to Q4 2025 and Q1 2025, G4 replaced G2 as one of the top three most frequent price setters. Collectively, the top three most frequent price setters accounted for 75.30% of periods with a price setter in Q1 2026, an increase from 68.58% in Q4 2025 and 71.32% in Q1 2025.

Chart 15. Trend of Price Setting Generation Companies



¹⁰ The capacity ratio of a generation facility measures its scheduled generation output relative to its maximum generation capacity. The generation types are: Combined-Cycle Gas Turbine (“CCGT”), Other Turbines (“OT”), Steam Turbine (“ST”), Open-Cycle Gas Turbine (“OCGT”), Electricity Imports (“Import”), and Energy Storage System (“ESS”).

Market Concentration in Q1 2026

Based on metered energy quantity (Chart 16), the top three generation companies remained unchanged for all quarters, namely G4, G5 and G6. Their combined market share increased slightly to 52.59% in Q1 2026, from 52.35% in Q4 2025 and 50.46% in Q1 2025. While G4 dominated the market share across the three quarters, its market share registered a 0.26 percentage point increase, and 1.40 percentage points decline on QoQ and YoY basis respectively.

Based on maximum generation capacity (Chart 17), G2, G4 and G5 continued to hold the largest shares in each of Q1 2025, Q4 2025 and Q1 2026. However, their combined share declined by 0.83 and 2.87 percentage points on QoQ and YoY respectively to 47.02% in Q1 2025. Compared to Q4 2025, the market shares were diluted across all the generation companies, with the exception of G13, a new generation company registering a new facility of 600MW in November 2025 and G10 revising the capacity of its facility upward slightly by 29.3MW. Comparing to Q1 2025, all the generation companies' market shares reduced across the board except for G9 and G13. This was due to the entry of one new facility of 100MW under G9 since Q2 2025 and one new facility of 600MW under G13 since Q4 2025.

In terms of generation types (Chart 18 and 19), CCGT remained the dominant generation type based on metered energy quantity and maximum generation capacity in Q1 2026. On QoQ, the market share of CCGT, OT, ST and OCGT based on metered energy quantity declined slightly by higher metered contributions from Import generation type. On a YoY comparison, higher contribution from OT and Import generation types reduced the market share for CCGT, ST and OCGT generation types. Based on maximum generation capacity, the market share of CCGT grew from Q4 2025 to Q1 2026, as there was an upward revision in the capacity of a CCGT. From Q1 2025 to Q1 2026, the market share of CCGT and OCGT increased due to an upward capacity revision of a CCGT facility in Q4 2025 and the entry of a 100MW OCGT facility in Q2 2025.

Chart 20 shows the frequency of pivotal suppliers per trading period for each month. Generally, the number of periods with at least one pivotal supplier was greater in Q1 2026 compared to Q4 2025, but lower compared to Q1 2025. The number of periods without a pivotal supplier declined to 1,143 in Q1 2026 from 1,381 in Q4 2025, but was higher than 714 in Q1 2025. There was only one period with seven or more pivotal suppliers this quarter, when the supply cushion dipped to 5.45% and the USEP surpassed \$500/MWh. In comparison, there were no such periods in Q4 2025 and one such period in Q1 2025.

Chart 16. Market Share of Generation Companies Based on Metered Energy Quantity¹¹

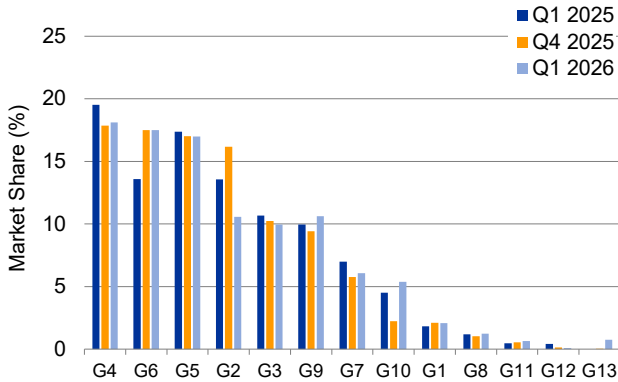


Chart 17. Market Share of Generation Companies Based on Maximum Generation Capacity¹²

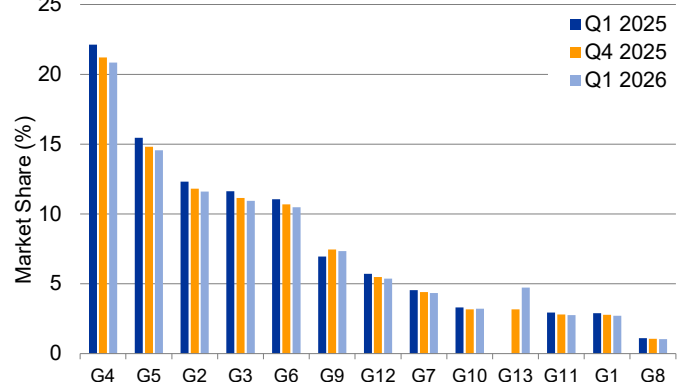


Chart 18. Market Share by Generation Types Based on Metered Energy Quantity¹³

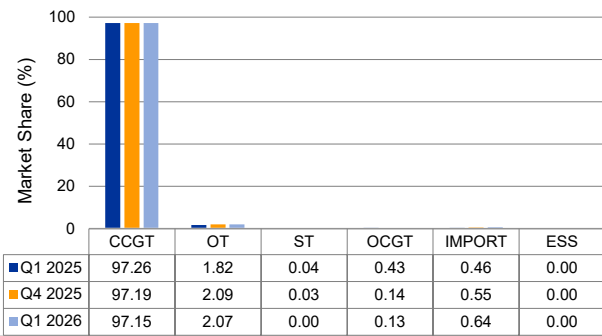


Chart 19. Market Share by Generation Types Based on Maximum Generation Capacity¹⁴

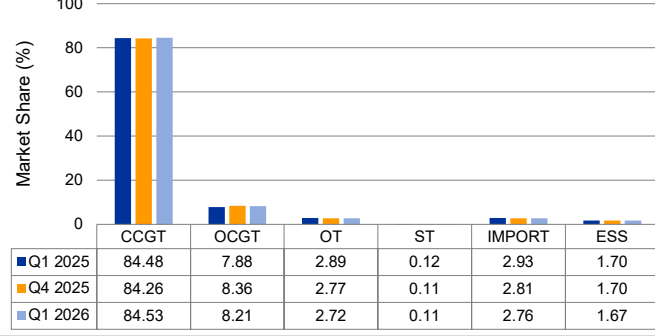
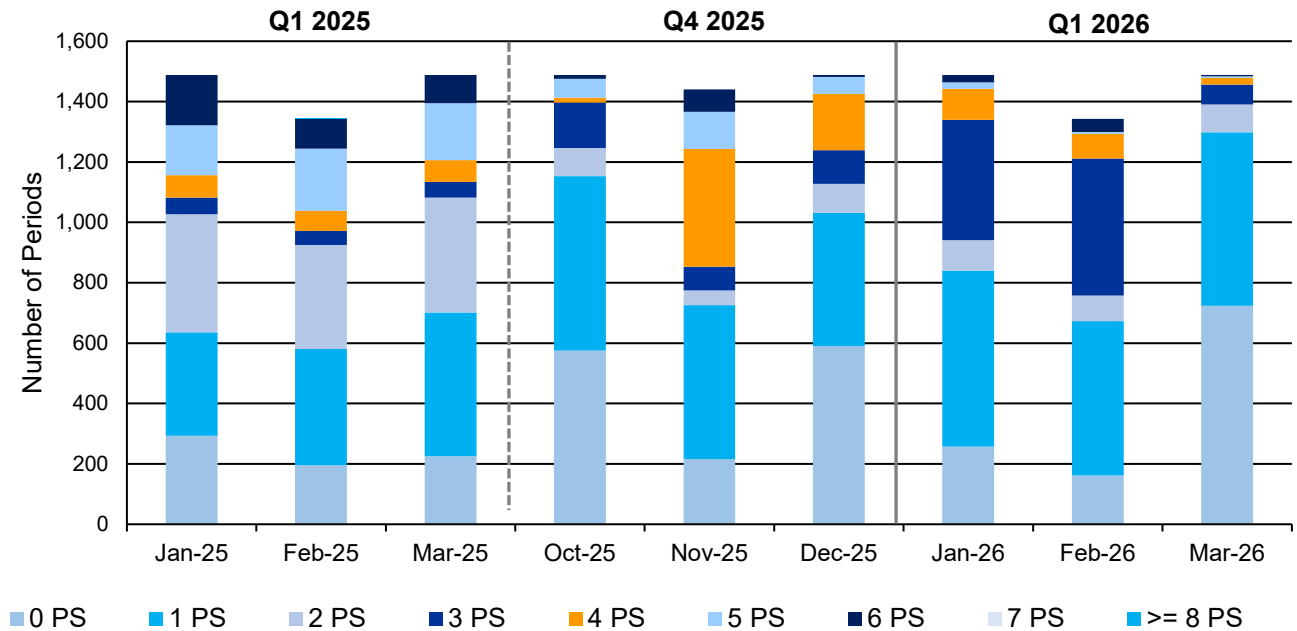


Chart 20. Frequency of Generation Companies as Pivotal Suppliers (PS) Per Period



¹¹ Excludes intermittent generation facilities and Market Participants with net negative quarterly metered energy quantity.

¹² Excludes intermittent generation facilities and Market Participants with less than 10MW maximum generation capacity. The actual capacities of the ESS facilities are used for the computation.

¹³ Excludes intermittent generation facilities and technology type with net negative quarterly metered energy quantity.

¹⁴ Excludes intermittent generation facilities and Market Participants with less than 10MW maximum generation capacity. The actual capacities of the ESS facilities are used for the computation.

Compliance Statistics for Q1 2026



Potential Breaches of the Market Rules



Determinations*



Enforcement

114 cases in total

0 non-gate closure
114 gate closure

134 determinations in total

3 cases determined to be in breach
2 cases determined to take no further action
129 cases determined not to be in breach

1 determination in total

0 financial penalty
1 non-compliance letter
0 suspension order
0 termination order
0 other MSCP order
\$0 of financial penalty imposed
\$2,500 of costs awarded

*This section includes determinations of cases referred to the MSCP in previous quarters.

The MSCP issued one rule breach determination this quarter:

- i. Two cases from Senoko Waste-to-Energy Pte. Ltd. regarding its failure to comply with gate closure rules on 13 November 2025 (Letter of non-compliance, and costs of \$2,500)

MSCP Market Watch

This is a quarterly report prepared by the Market Assessment Unit (“MAU”) of EMC and submitted to the MSCP. The report summarises the MAU’s day-to-day monitoring, evaluation activities and analyses, and compares the market performance for the current quarter with the quarter a year ago and the previous quarter.

All prices and percentages in this report are rounded off to two decimal places.

The [User Guide to MSCP Market Watch](#) provides a glossary of the terms used in the MSCP Market Watch among other information to facilitate readers’ understanding.

Market Surveillance and Compliance Panel

The MSCP is established by the EMC Board in accordance with section 2.6 of Chapter 3 of the Singapore Electricity Market Rules.

The MSCP, with the assistance of the MAU, monitors and investigates the conduct of market participants, the market support services licensee, EMC and the Power System Operator and the structure and performance of the wholesale electricity markets.

The MSCP comprises the following members:

- Professor Walter Woon, Chairman
- Philip Chua
- Professor Euston Quah
- Dr Stanley Lai
- Yeo Yek Seng

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