



eomer

Sharper USEP Forecasts, Priced at the Quote Gate

Benchmarked on the two weeks of half-hourly USEP you shared: **+SGD 11.4k per MW** of flexible power over a previous-day schedule, and **+SGD 62k per MW-year** at the pace of the year to date

One call per gate: the quote plus a rolling 24 h curve

A full 48-step forecast every half-hour, about 30 ms per call, inside the 5-minute quote gate

Runs inside the gate

30 ms

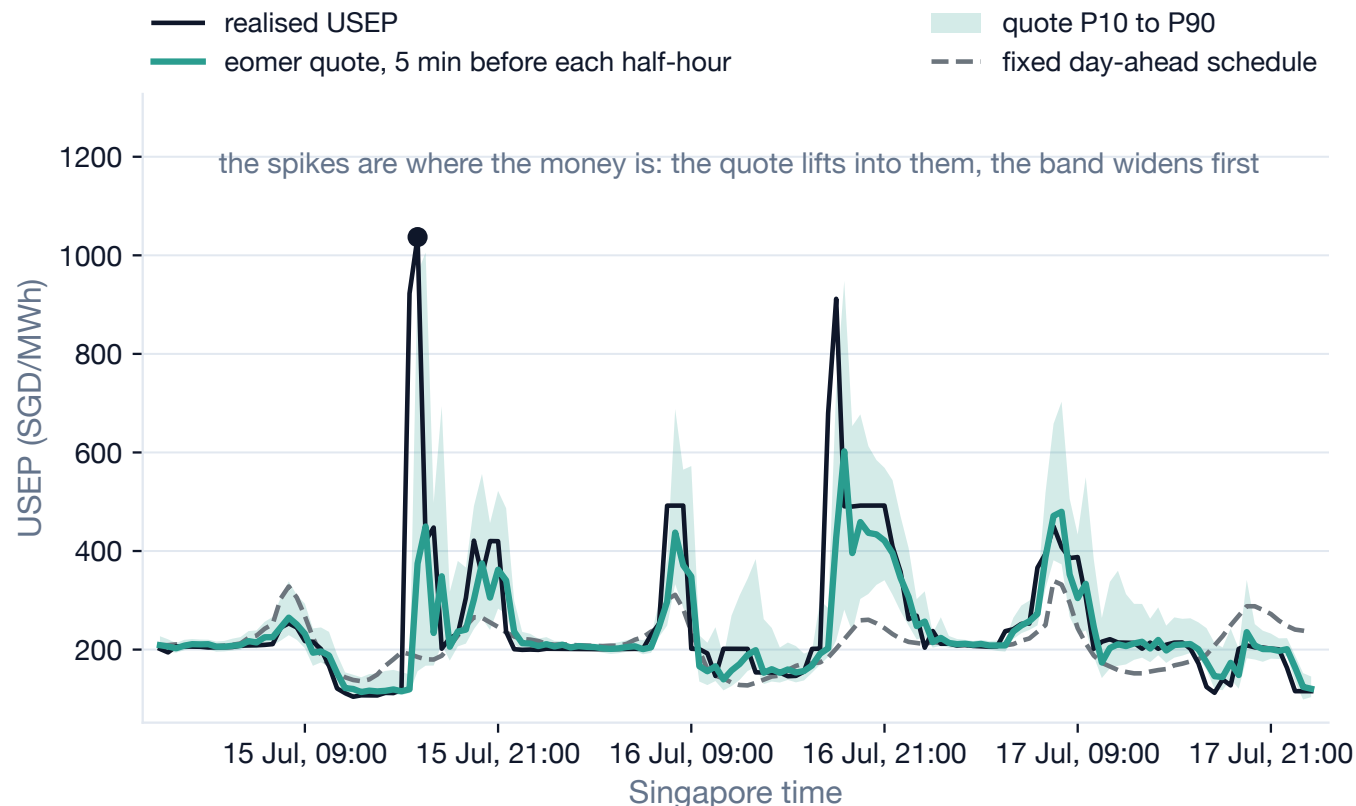
per forecast call

10,000x

headroom inside the 5-minute quote gate

- The quote is step 1 of the freshest forecast: error 44 vs 65 day-ahead
- Spike recall 63% against 14% for a previous-day schedule
- Price history in, quantiles out: no covariate feeds, no re-training

Rolling gate quotes against realised USEP, 15 to 17 July



All 48 gates cost about 3 seconds of compute per day: the widened band on spike days is the risk signal at no extra cost

Backtest output over three days of the fortnight you shared; each quote is the one-step forecast issued at the preceding half-hour boundary, and the same call also returns the next 24 hours. NEMS prices each period ex ante, so the running period is in the context at gate closure; live context uses estimated real-time USEP.

Your fortnight was worth 6x the naive at the gate

Asset-free daily spread on realised USEP: SGD 13.5k per MW of flexible power, against 2.1k for a previous-day schedule

What the signal is worth

+SGD 11.4k

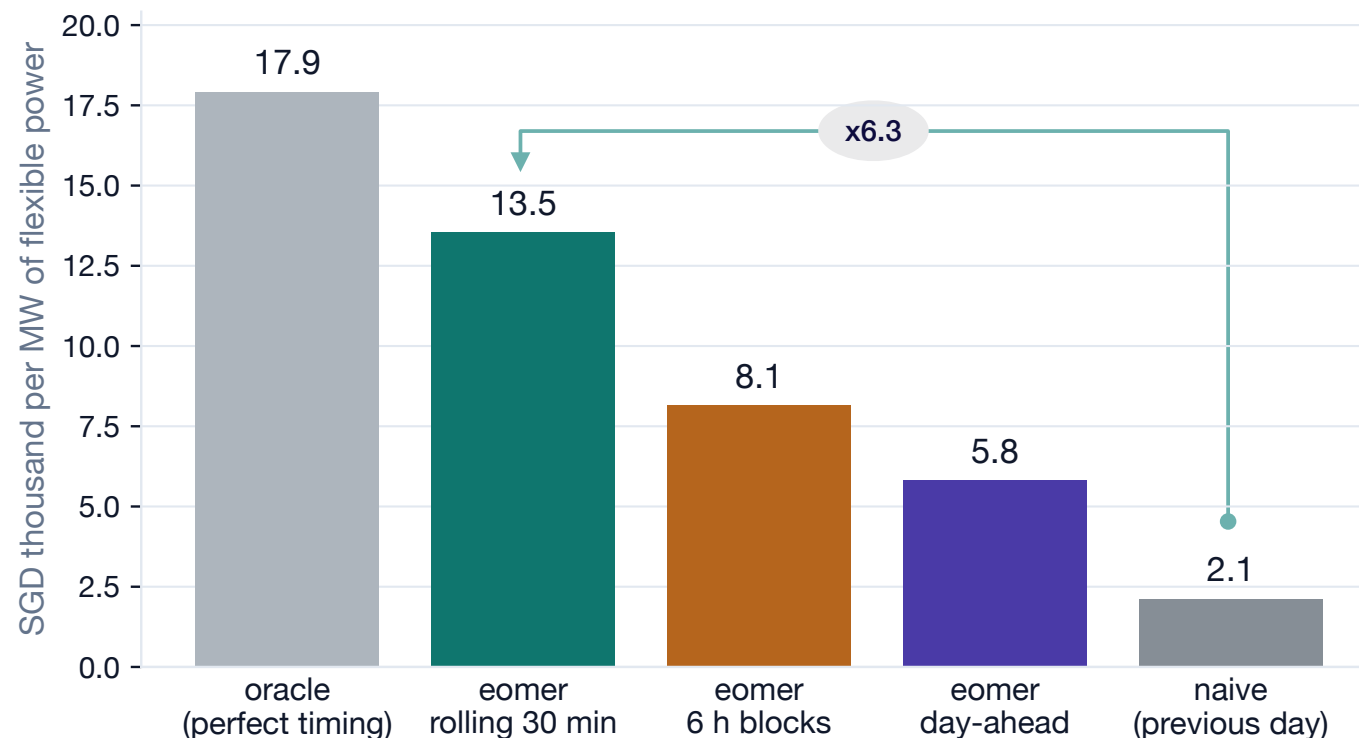
per MW of flexible power in the two weeks you shared

+SGD 62k

per MW-year at the January to July pace

- Day-ahead alone captures 32%; re-quoting every gate takes it to 76%
- Year to date that is +SGD 33k per MW of flexible power already banked
- Scales linearly with flexible MW, load or generation

Spread value over your two weeks, by configuration



Two weeks, +SGD 11.4k per MW of flexible power; at the January to July pace, +SGD 62k per MW-year

Long the 8 cheapest and short the 8 priciest forecast half-hours each day, settled at realised USEP; no asset, efficiency or power limits, price-taker assumption. Your fortnight was unusually volatile, so annualising it directly would imply about SGD 298k per MW-year; the annual and year-to-date figures quoted here use the 194 delivery days from 1 January instead. Indicative signal value, not a dispatch backtest.

The advantage compounds: +SGD 33k per MW so far this year

Cumulative spread value on realised USEP over 194 delivery days, 1 January to 13 July 2026

Year to date, per MW of flex

+SGD 33k

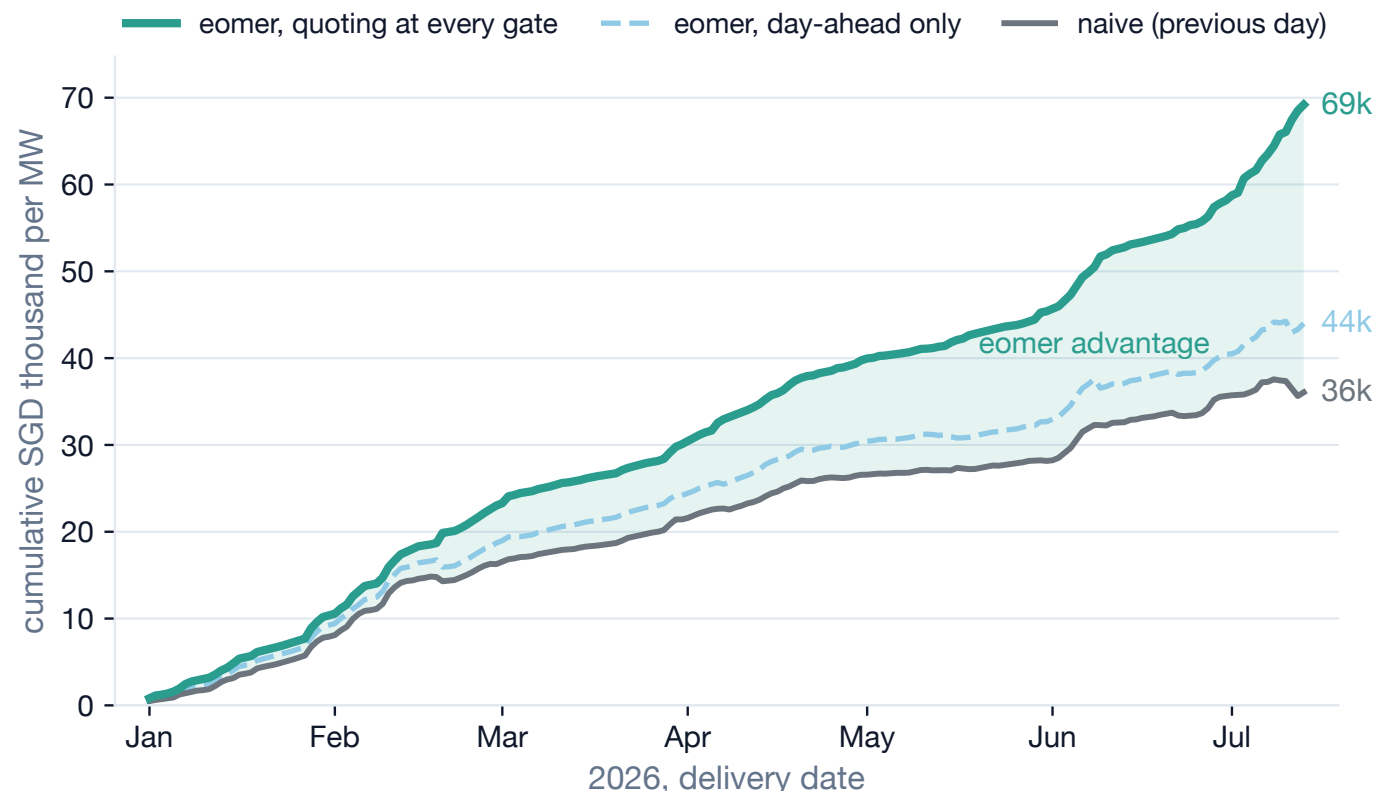
more than a previous-day schedule earns

1.9x

the naive's cumulative value over the same 194 days

- Day-ahead forecasting alone earns +SGD 8k; quoting at every gate earns +SGD 33k
- No month reverses the ranking, so this is a pace rather than a lucky window
- On pace for +SGD 62k per MW-year, scaling linearly with flexible MW

Cumulative spread value per MW of flexible power



Year to date the gap is +SGD 33k per MW of flexible power, and it compounds every delivery day

Same construction as the previous slide, accumulated daily: long the 8 cheapest and short the 8 priciest forecast half-hours each day, settled at realised USEP, 0.5 MWh per half-hour per MW of flexible power. No asset, efficiency or power limits, price-taker assumption. Indicative signal value, not a dispatch backtest.

The numbers behind the commercial case

Mean absolute error by commitment length, and the trading signal metrics at the 30-minute rung

Mean absolute error, per MWh

commitment	194 delivery days, 1 Jan to 13 Jul 2026			The fortnight you shared, 14 to 27 Jul 2026		
	eomer	naive (last value)	naive (prev day)	eomer	naive (last value)	naive (prev day)
24 h (day-ahead)	24.0	33.4	33.6	65.2	80.7	101.4
6 h blocks	22.2	30.8	33.6	58.5	83.4	101.4
3 h blocks	20.3	30.7	33.6	58.0	88.3	101.4
1 h blocks	16.4	19.3	33.6	47.9	50.3	101.4
30 min blocks	14.5	15.5	33.6	43.8	44.5	101.4

Signal quality at the 30-minute rung, 194 days

metric	eomer	naive (prev day)
rank correlation with realised price	0.82	0.51
directional accuracy	87%	69%
spike recall (top decile half-hours)	57%	31%
share of perfect-timing spread captured	81%	42%
P10 to P90 coverage (nominal 80%)	79%	90%

Identical prices and delivery windows per arm. The previous-day naive is horizon-invariant by construction, so its column repeats down the ladder; the last-value naive (random walk) strengthens as origins approach delivery. Every eomer advantage in the 194-day table clears a paired clustered bootstrap at 95%. Coverage is the share of realised prices inside the P10 to P90 band against a nominal 80%, so closer to 80 is better calibrated, not higher.