

Spot prices for the week were around 20 per cent lower across the mainland compared to the previous week, averaging \$29/MWh in South Australia, \$26/MWh in Victoria, \$23/MWh in New South Wales and \$18/MWh in Queensland. Peak demand was around 5 per cent lower across these regions on the same basis.

In Tasmania the spot price averaged \$127/MWh, continuing its upward trend.

The price volatility index was consistent with the longer term trend in all mainland regions. In Tasmania, the volatility index was level with the previous week.

Turnover in the energy market was around \$112 million, while the total cost of ancillary services for the week increased to \$660,000 or 0.6 per cent of the total turnover in the energy market. The increase was primarily the result of a planned network outage in Victoria. The cost for ancillary services in Tasmania totalled \$130,000 or 0.5 per cent of the energy market turnover for that region.

Demand forecasts produced 4 and 12 hours ahead varied from actual by more than 5 per cent in around a quarter of all trading intervals across the market with around half of all trading intervals in South Australia and Tasmania affected. Significant variations between forecast and actual prices occurred in 31 or 9 per cent of all trading intervals.

Energy prices

Figure 1 sets out national demand and spot prices in each region for each trading interval. Figure 2 compares the volume weighted average price with the averages for the previous week, the same quarter last year and for the 2004-05 financial year. Figure 3 compares the weekly price volatility index with the averages for the previous week and the same quarter last year.

Figure 1: national demand and spot prices

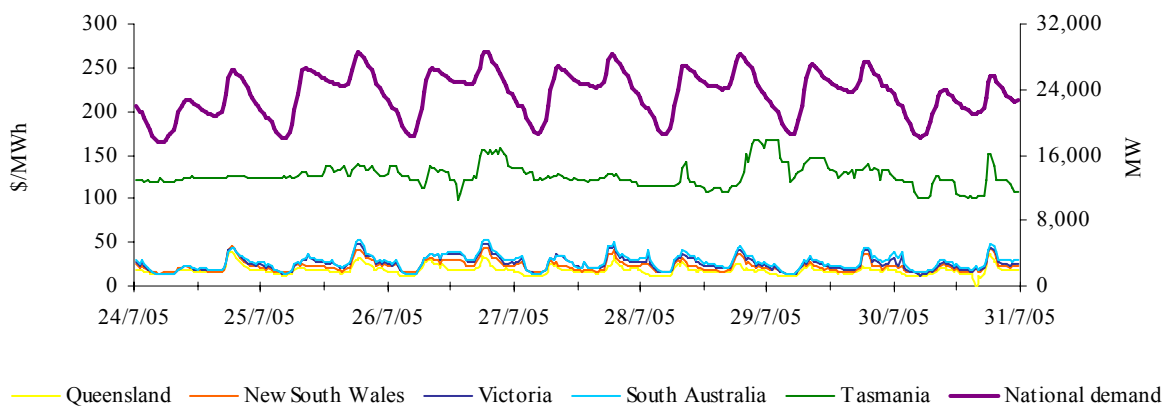


Figure 2: volume weighted average spot price for energy market (\$/MWh)

	QLD	NSW	VIC	SA	TAS
Last week	18	23	26	29	127
Previous week	22	29	31	36	117
Same quarter last year	27	31	28	36	-
Financial year 2004 - 05	31	46	29	39	-
% change from previous week	▼18%	▼20%	▼16%	▼20%	▲9%
% change from same quarter last year	▼31%	▼27%	▼7%	▼22%	-
% change from 2003 - 04	▼1%	▲24%	▲7%	0%	-

Figure 3: volatility index during peak periods

	QLD	NSW	VIC	SA	TAS
Last week	0.52	0.63	0.59	0.57	0.23
Previous week	0.91	0.91	0.77	0.77	0.16
Same quarter last year	0.64	0.74	0.71	0.56	-

Figures 4 to 8 show the weekly correlation between spot price and demand.

Figure 4: Queensland

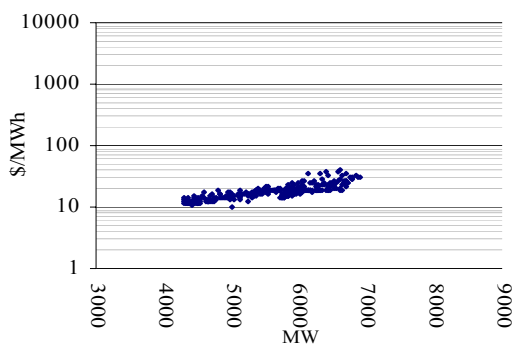


Figure 5: New South Wales

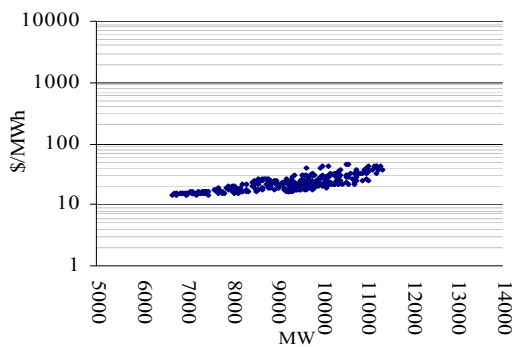


Figure 6: Victoria

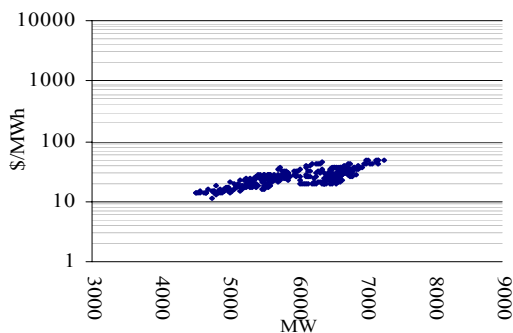


Figure 7: South Australia

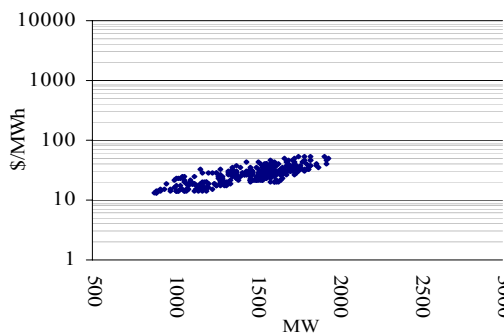
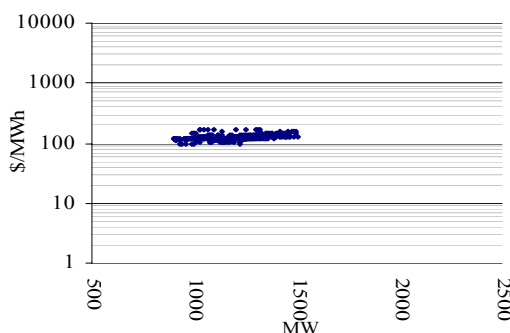


Figure 8: Tasmania



Spot prices peaked at \$167/MWh in Tasmania on Thursday evening. Across the mainland maximum spot prices ranged from \$39/MWh in Queensland to \$54/MWh in South Australia.

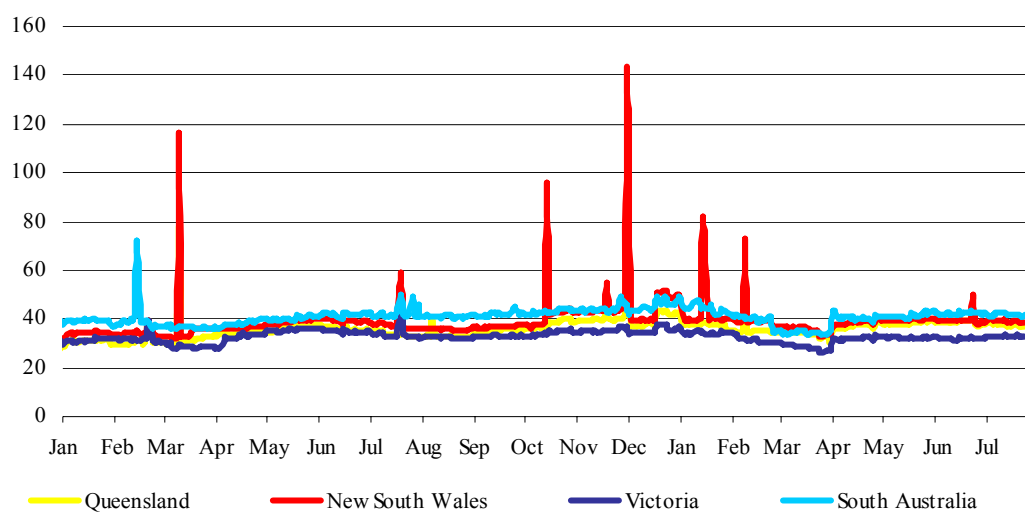
At 3.10pm on Saturday, following the unplanned loss of a transmission element in New South Wales, flows into New South Wales on QNI were reduced by more than 200MW in one despatch interval. This resulted in a 5-minute price in Queensland of -\$68/MWh. The price returned to normal within 10 minutes.

Figure 9 sets out the d-cyphaTrade wholesale electricity price index (WEPI) for each region throughout the week excluding Tasmania. Figure 10 sets out the WEPI since 1 January 2004.

Figure 9: d-cyphaTrade WEPI for the week

	Monday	Tuesday	Wednesday	Thursday	Friday
Queensland	37.16	37.37	37.68	37.86	37.87
New South Wales	38.20	39.12	38.71	38.48	38.11
Victoria	32.76	33.23	33.09	32.80	32.61
South Australia	41.64	42.15	42.21	41.34	41.15

Figure 10: d-cyphaTrade WEPI



Reserve

There were no low reserve conditions forecast throughout the week. Figures 11 to 14 show spot price, net imports and limits at the time of weekly maximum demand.

Figures 11 to 14: spot price, net import and limit at time of weekly maximum demand

Figure 11: Queensland

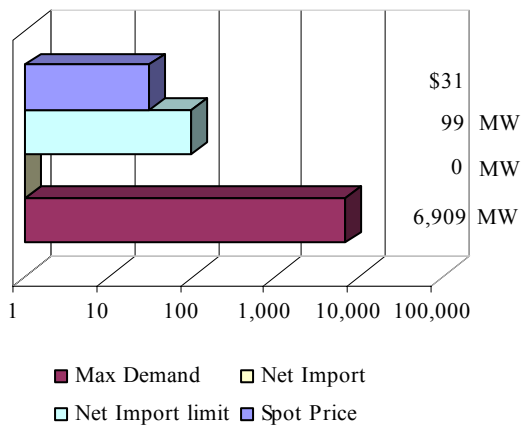


Figure 12: New South Wales

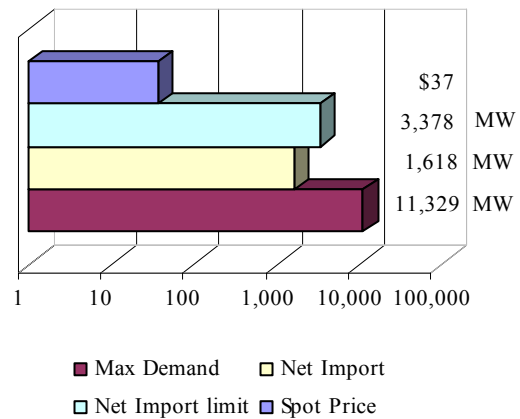


Figure 13: Victoria

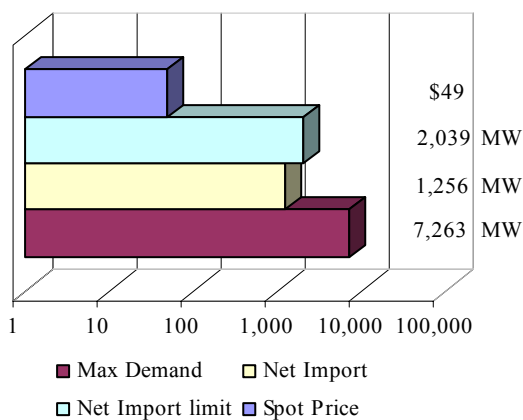
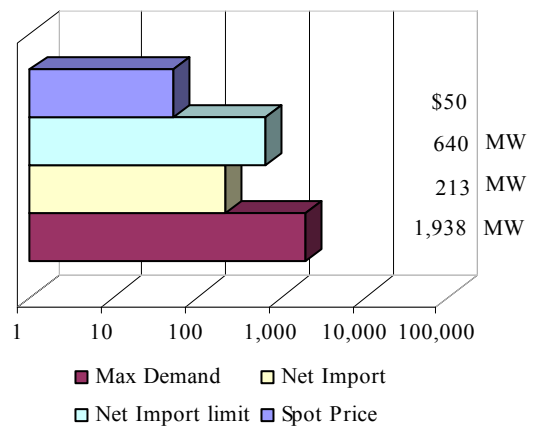


Figure 14: South Australia



In Tasmania, the demand reached a maximum of 1,501MW on Wednesday morning. The spot price at the time was \$127/MWh.

Price variations

There were 31 trading intervals where significant variations between forecast and actual prices occurred, calculated 4 and 12 hours ahead of despatch. Figures 15 to 18 set out the correlation between the actual price and demand and those forecast. The information is presented in terms of the percentage difference from actual. Price differences beyond 200 per cent have been capped.

Figure 15: Queensland

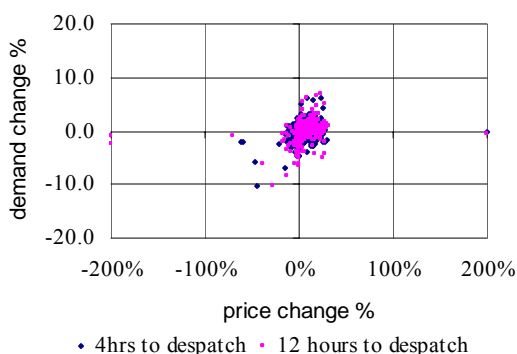


Figure 16: New South Wales

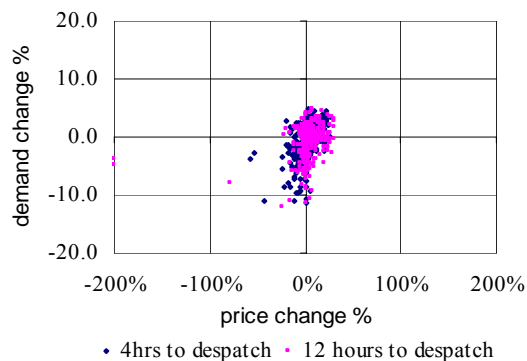


Figure 17: Victoria

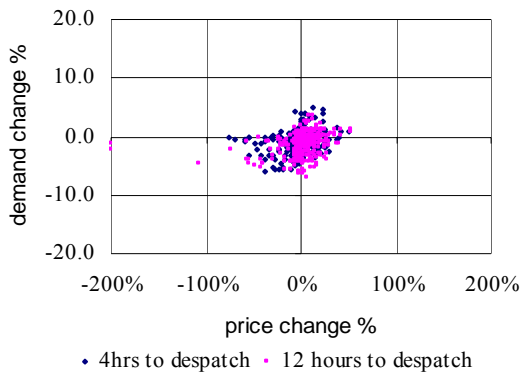


Figure 18: South Australia

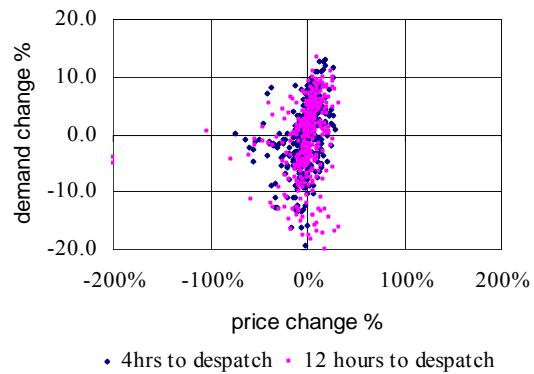


Figure 19: Tasmania

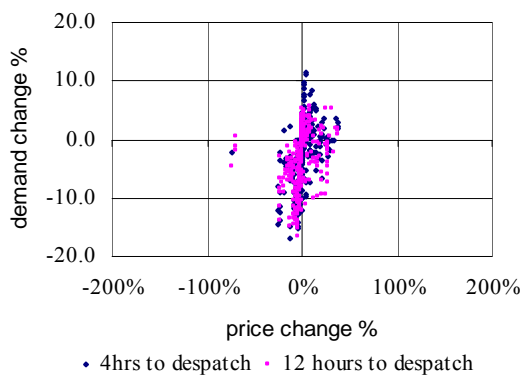
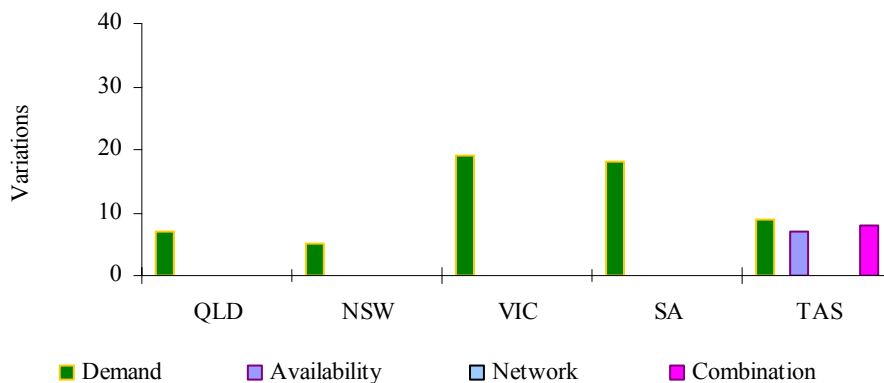


Figure 20 summarises the number and most probable reason for variations between forecast and actual prices.

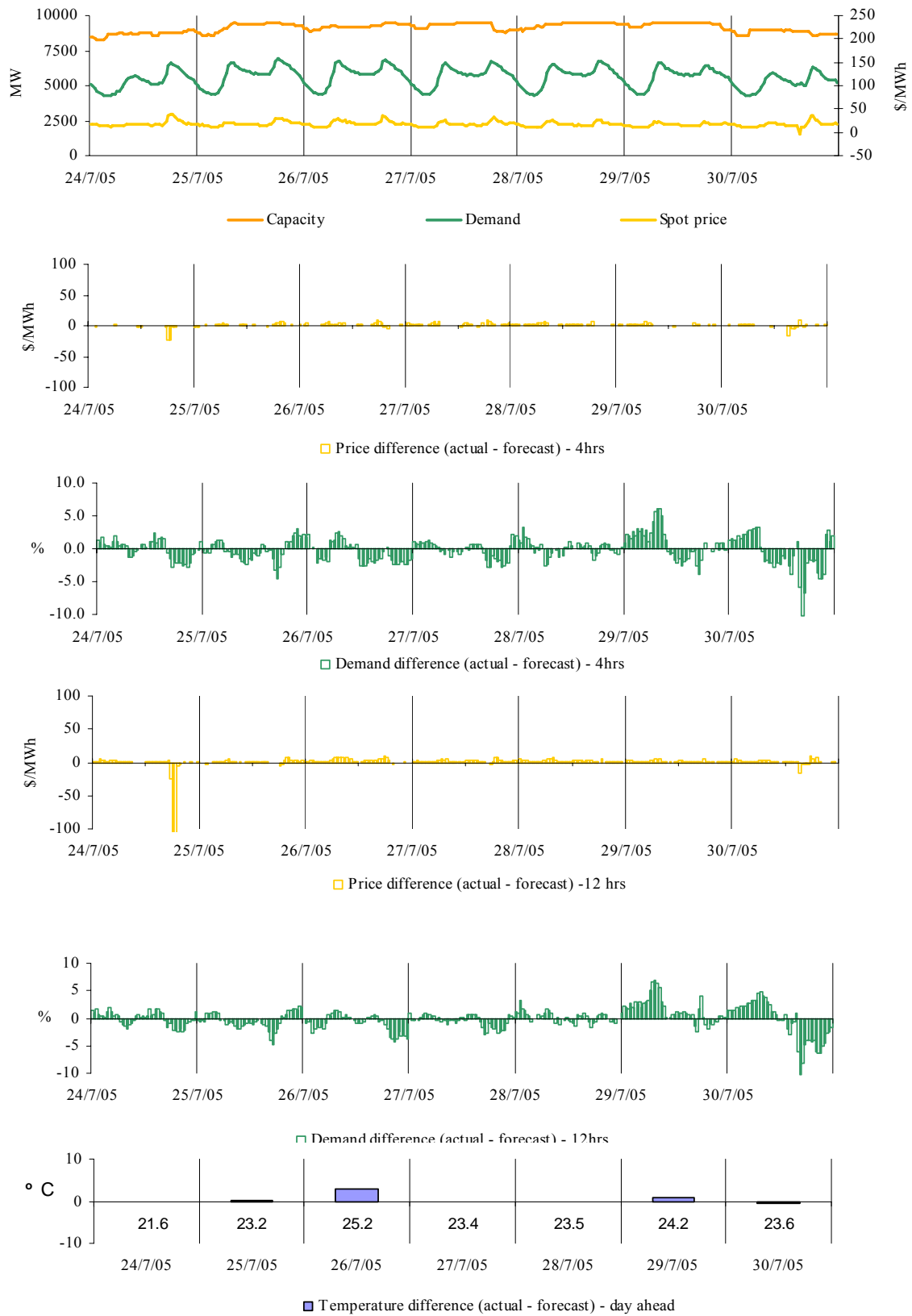
Figure 20: reasons for variations between forecast and actual prices



Price and demand

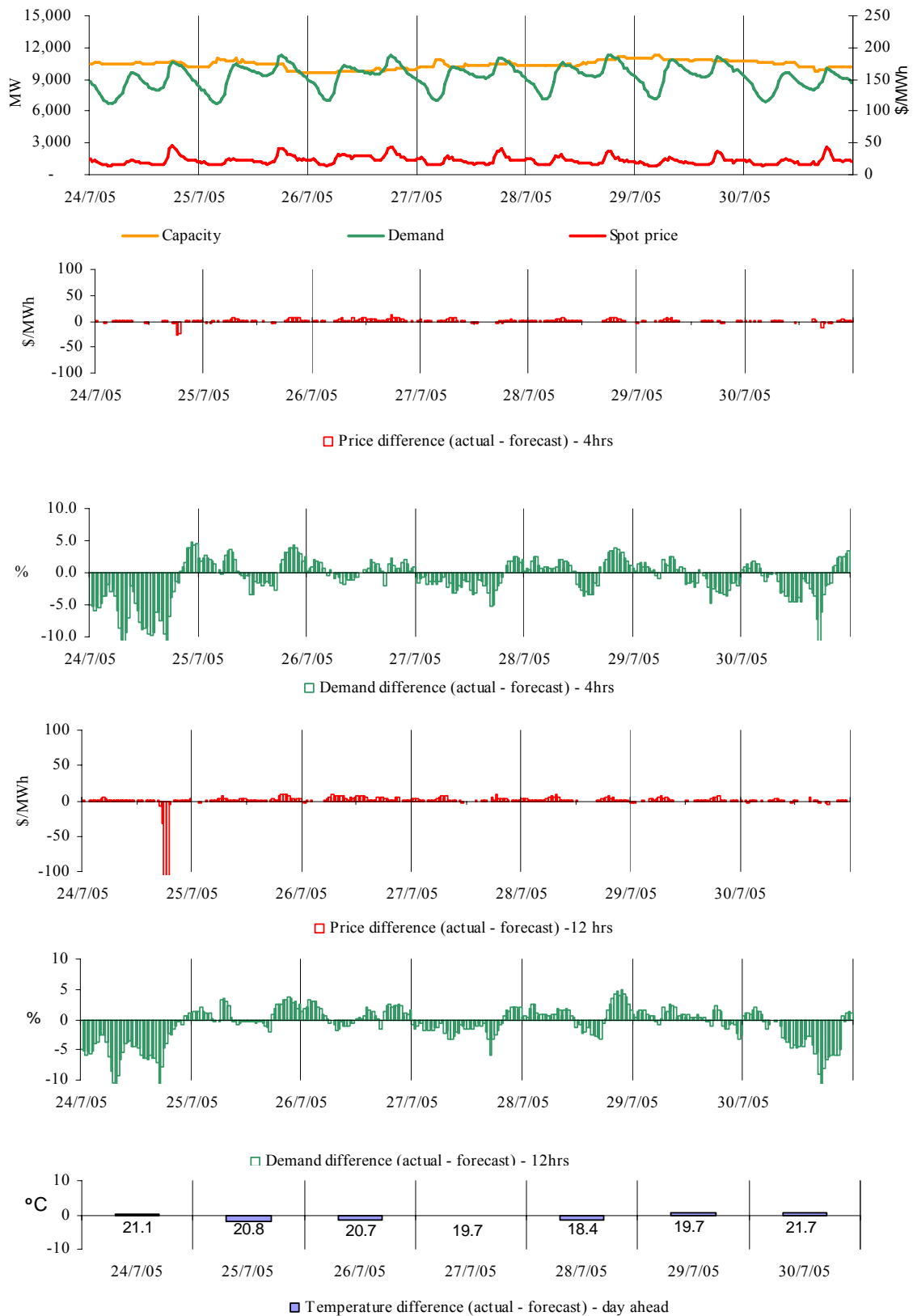
Figures 21 – 50 set out details of spot prices and demand on a regional basis. They include the actual spot price and demand outcomes and difference graphs both four and twelve hours ahead of despatch on a daily basis. The differences between the maximum temperature and the temperature forecast at around 6.00 pm the day before are also included. Figures 51 - 55 set out, for each region, the extent of capacity offered into the market within a series of price thresholds. Actual price and generation despatched in a region are overlaid.

Figures 21-26: Queensland actual spot price, demand and forecast differences



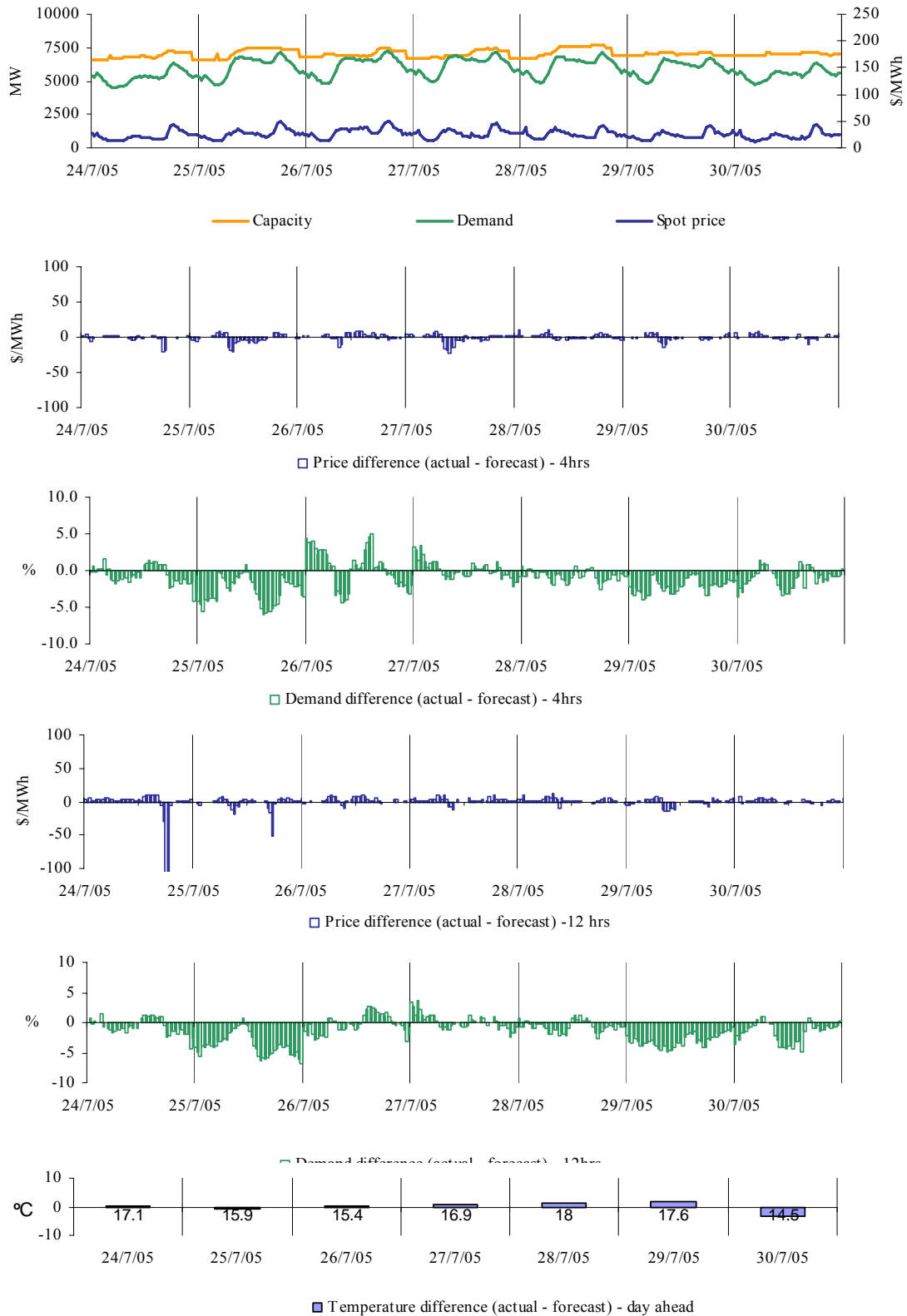
There were no occasions in Queensland where the spot price was greater than three times the weekly average price of \$18/MWh.

Figures 27-32 New South Wales actual spot price, demand and forecast differences



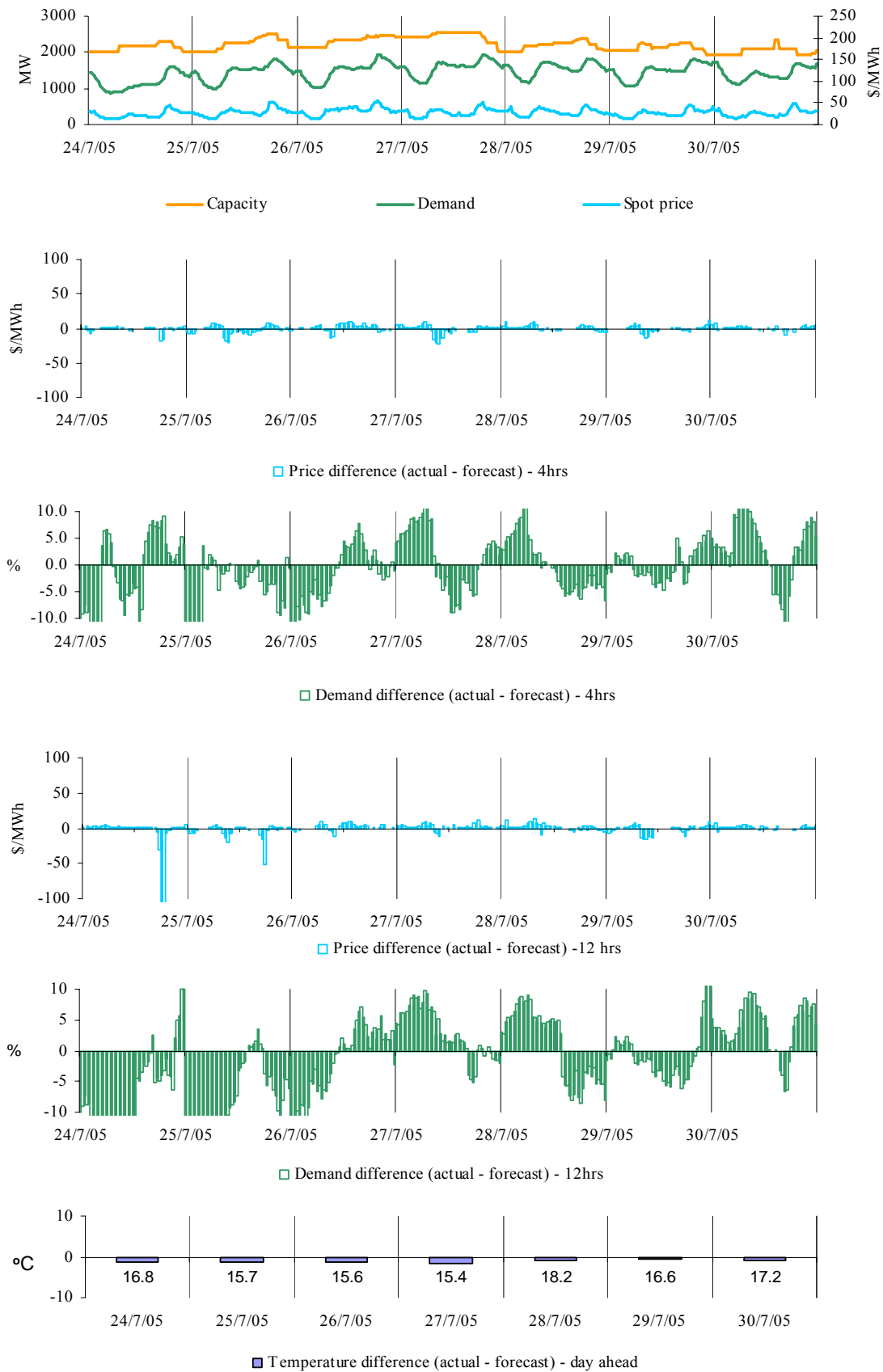
There were no occasions in New South Wales where the spot price was greater than three times the weekly average price of \$23/MWh.

Figures 33-38: Victoria actual spot price, demand and forecast differences



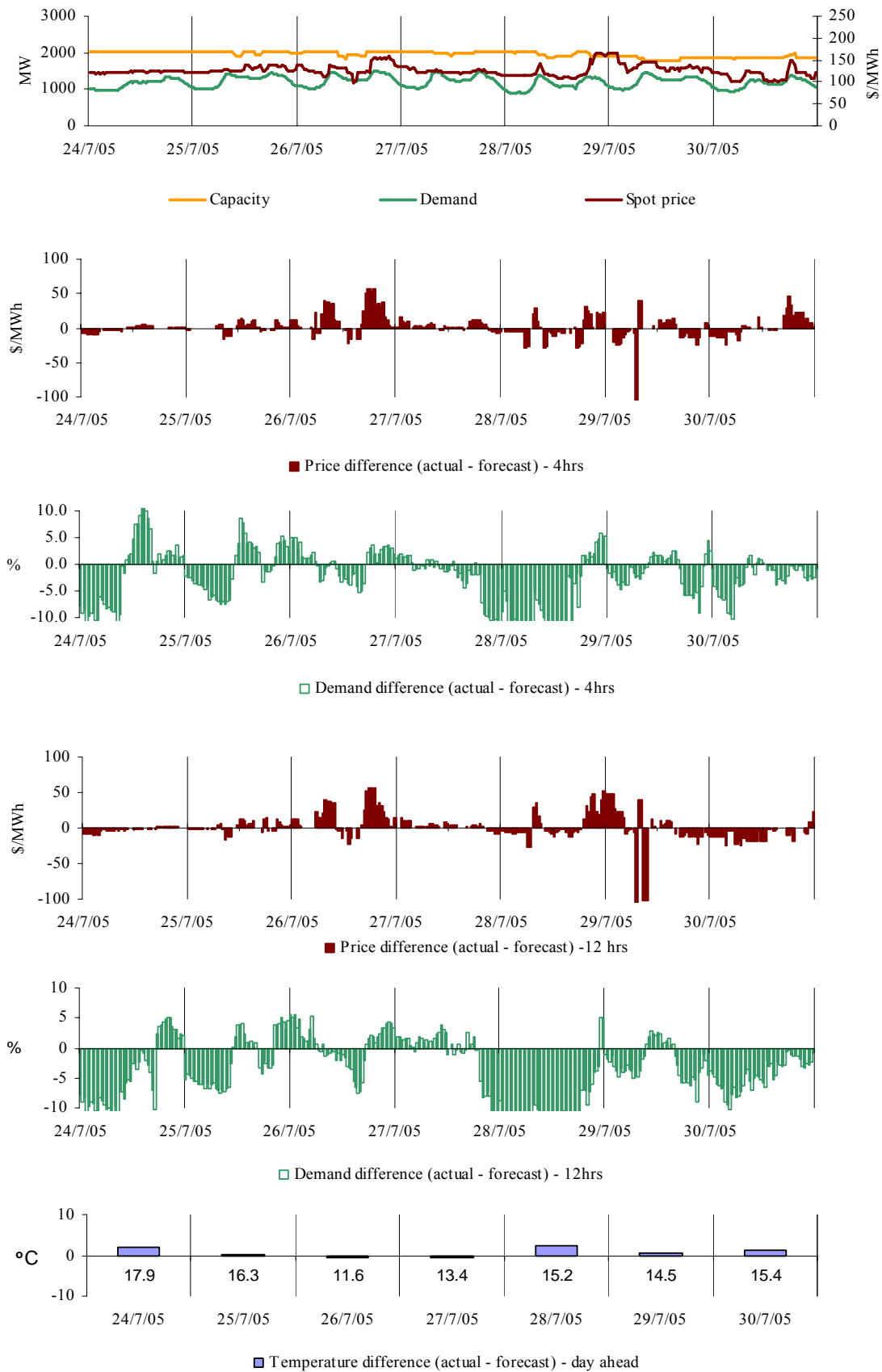
There were no occasions in Victoria where the spot price was greater than three times the weekly average price of \$26/MWh.

Figures 39-44: South Australia actual spot price, demand and forecast differences



There were no occasions in South Australia where the spot price was greater than three times the weekly average price of \$29/MWh.

Figures 45-50: Tasmania actual spot price, demand and forecast differences



There were no occasions in Tasmania where the spot price was greater than three times the weekly average price of \$127/MWh.

Figure 51: Queensland closing bid prices, despatched generation and spot price

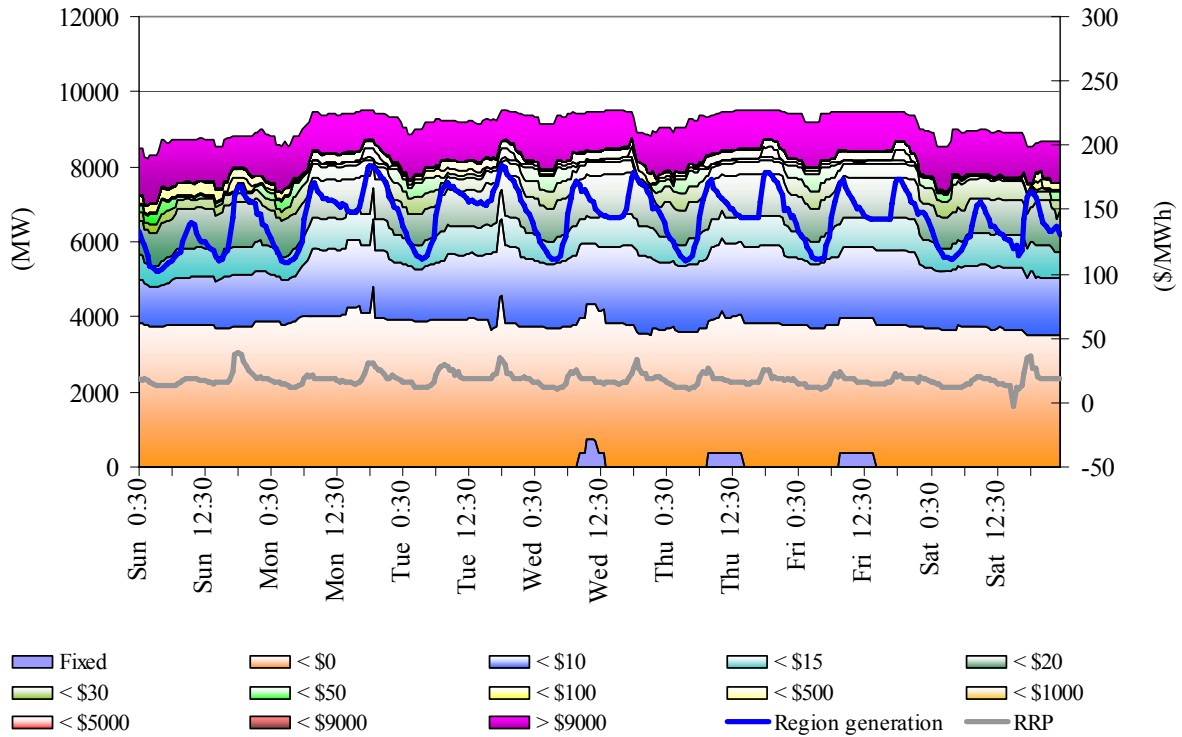


Figure 52: New South Wales closing bid prices, despatched generation and spot price

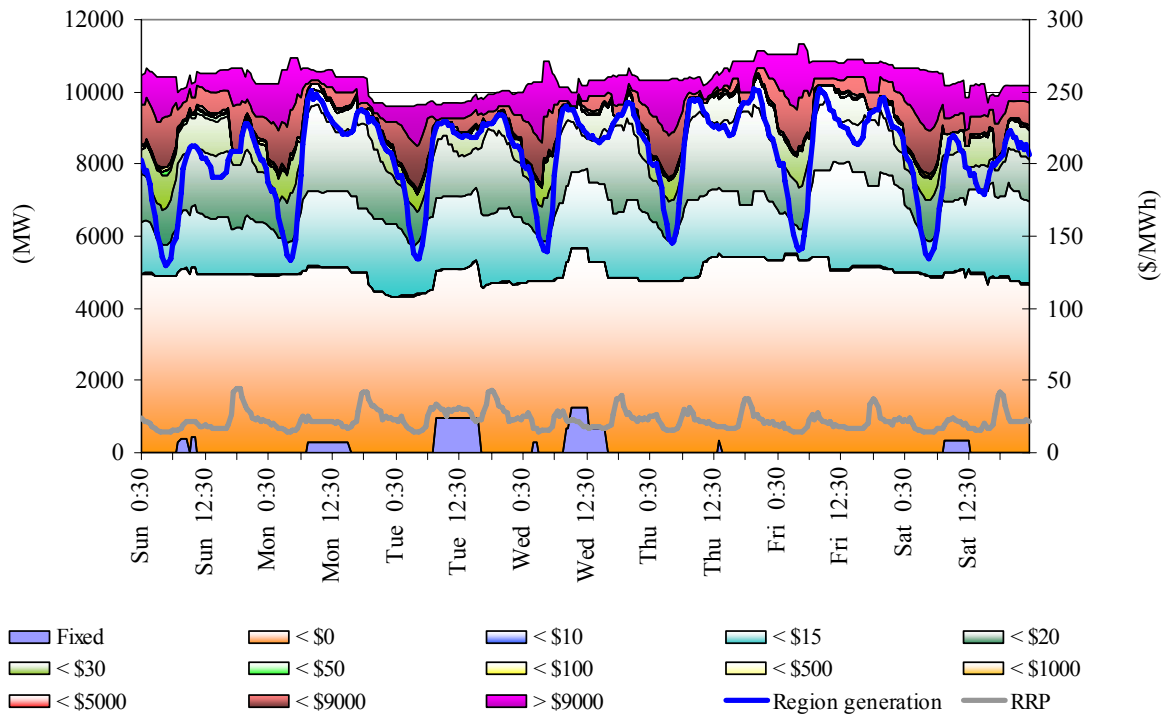


Figure 53: Victoria closing bid prices, despatched generation and spot price

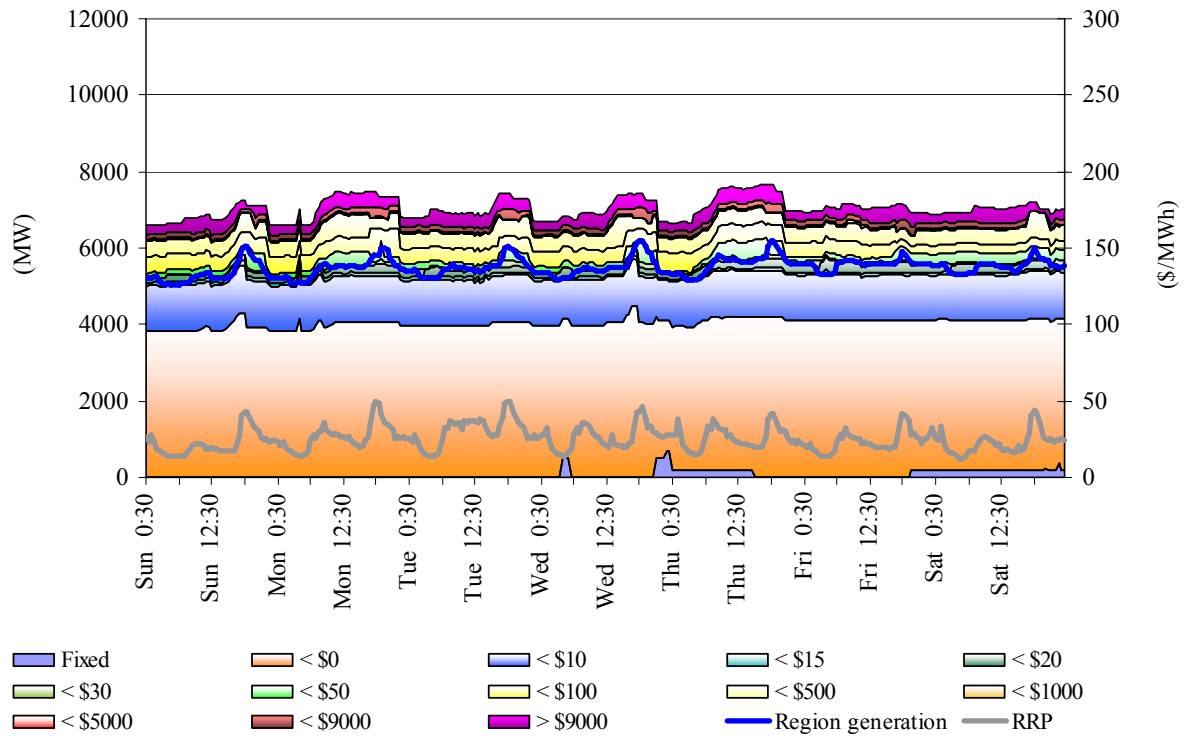


Figure 54: South Australia closing bid prices, despatched generation and spot price

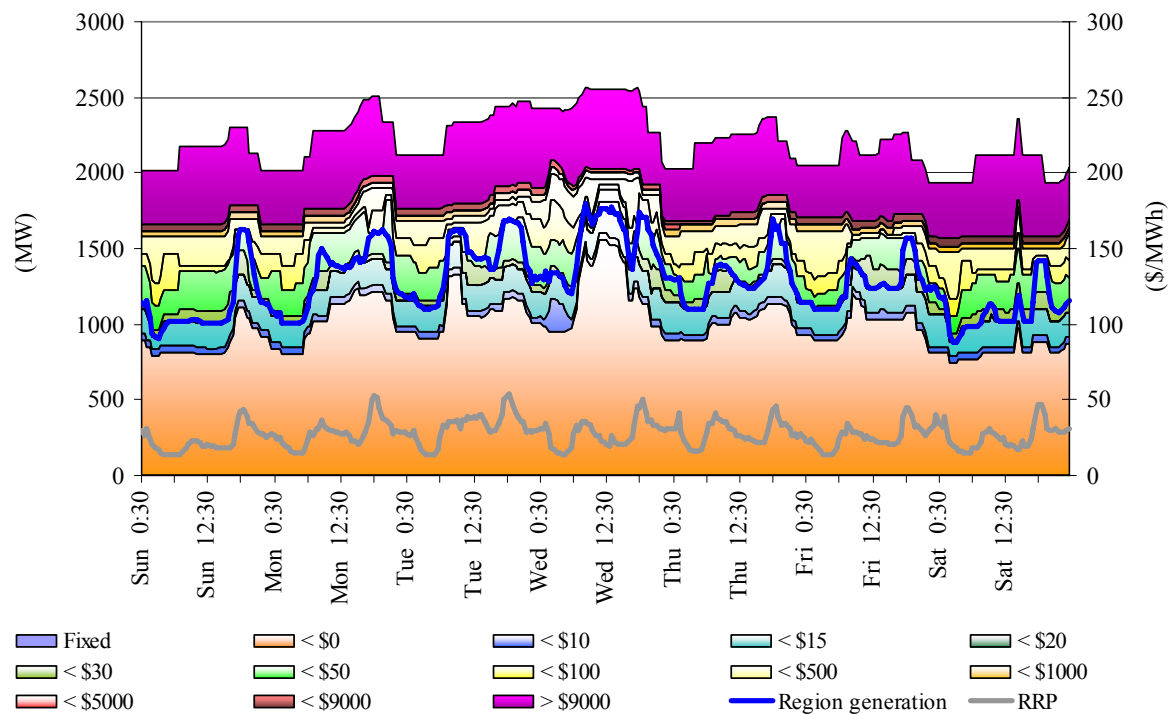
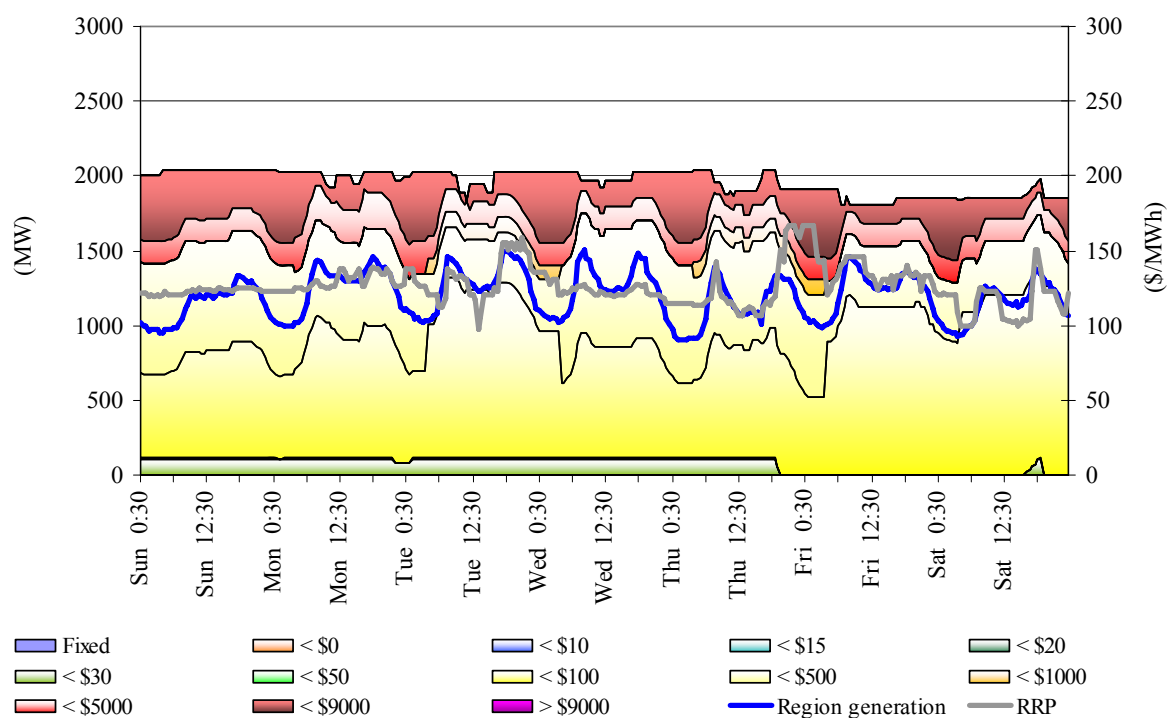


Figure 55: Tasmania closing bid prices, despatched generation and spot price



Ancillary service market

The total cost of ancillary services for the week was \$660,000 or 0.6 per cent of the total turnover in the energy market. A planned transmission outage in Victoria resulted in an increased requirement for lower contingency services from Tuesday to Friday. Small local requirements for ancillary services were required in Queensland, following the unplanned outage of the Liddell to Muswellbrook 330kV transmission line in New South Wales on Saturday afternoon. Figure 56 summarises the volume weighted average prices and costs for the eight frequency control ancillary services across the interconnected regions.

The cost for ancillary services in Tasmania totalled \$129,000 or 0.5 per cent of the energy market turnover for that region. Figure 57 summarises the volume weighted average prices and costs for the eight frequency control ancillary services for Tasmania.

Figure 56: volume weighted average frequency control ancillary service prices

	Raise 6 sec	Raise 60 sec	Raise 5 min	Raise reg	Lower 6 sec	Lower 60 sec	Lower 5 min	Lower reg
Last week (\$)	1.47	0.77	0.91	1.67	0.16	1.09	6.71	1.84
Previous week(\$)	1.29	0.58	0.87	1.44	0.17	1.56	2.57	1.79
Last Quarter(\$)	2.43	0.81	0.99	1.07	0.23	0.96	2.96	1.51
Market Cost (\$1000s)	\$78	\$41	\$62	\$39	\$1	\$23	\$244	\$43
% of energy market	0.09%	0.05%	0.07%	0.05%	0.00%	0.03%	0.28%	0.05%

Figure 57: volume weighted average frequency control ancillary service price for Tasmania

	Raise 6 sec	Raise 60 sec	Raise 5 min	Raise reg	Lower 6 sec	Lower 60 sec	Lower 5 min	Lower reg
Last week (\$)	1.21	1.05	1.05	1.14	1.72	1.05	1.05	1.11
Previous week(\$)	1.48	1.05	1.06	1.36	1.06	1.05	1.05	1.05
Market Cost (\$1000s)	\$11	\$10	\$11	\$10	\$22	\$31	\$26	\$9
% of energy market	0.05%	0.04%	0.04%	0.04%	0.09%	0.13%	0.11%	0.04%

Figure 58 shows the daily breakdown of cost for each frequency control ancillary service.

Figure 58: daily frequency control ancillary service costs

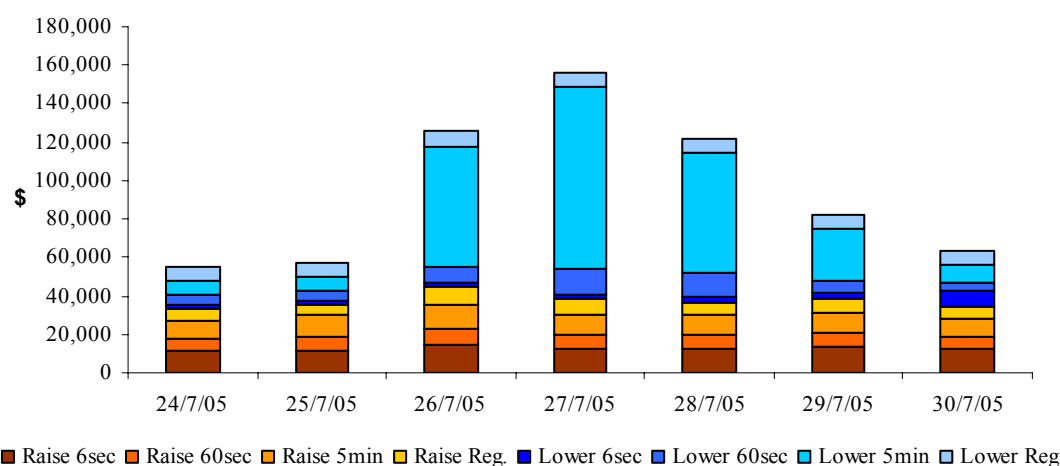
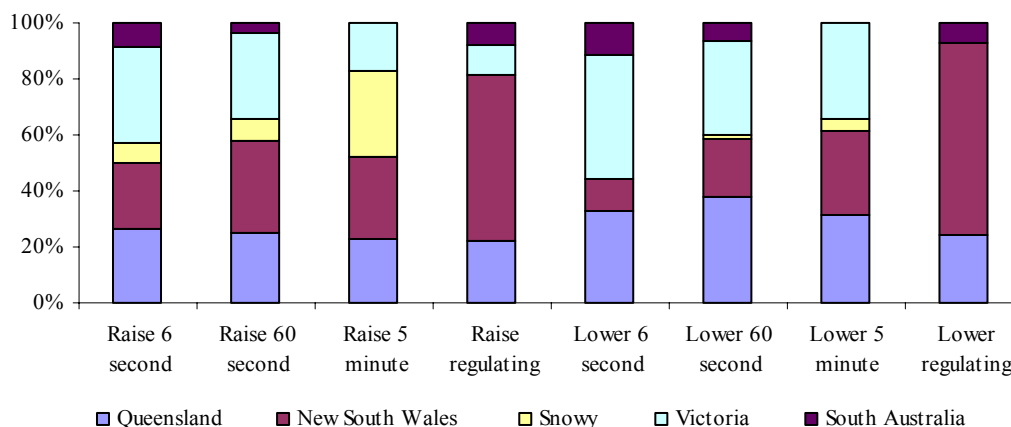


Figure 59 shows the regional weekly participation in each of the ancillary service markets on the mainland.

Figure 59: regional participation in ancillary services



Figures 60 and 61 show 30-minute prices for each of the ancillary services.

Figure 60: prices for raise services

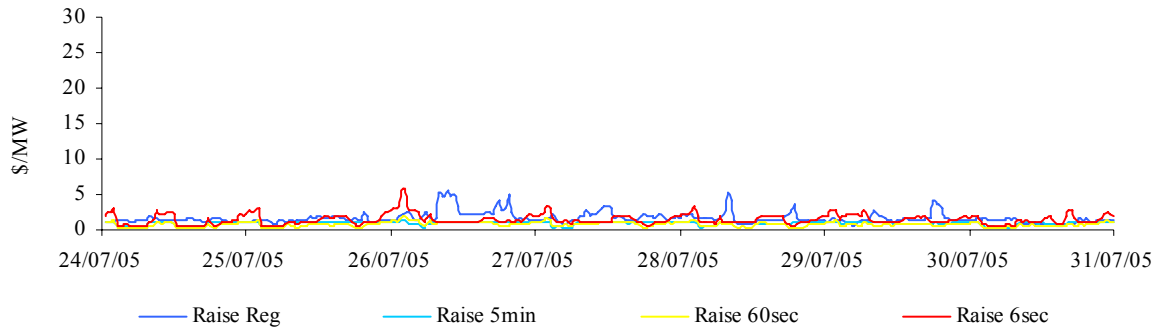


Figure 60A: prices for raise services - Tasmania

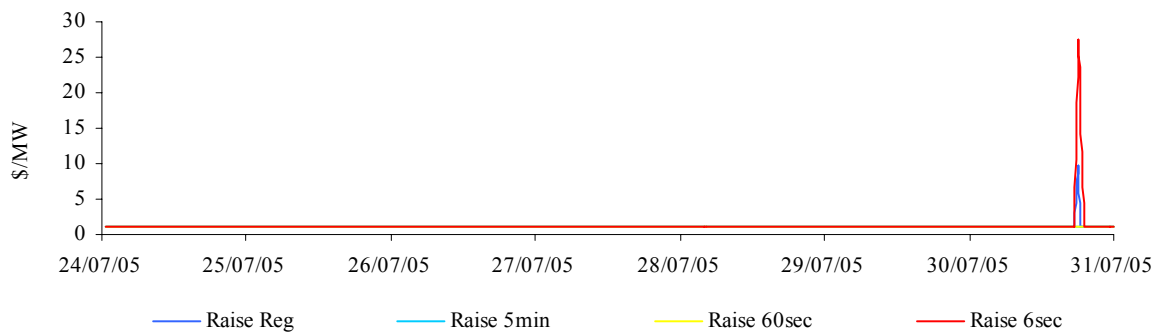


Figure 61: prices for lower services

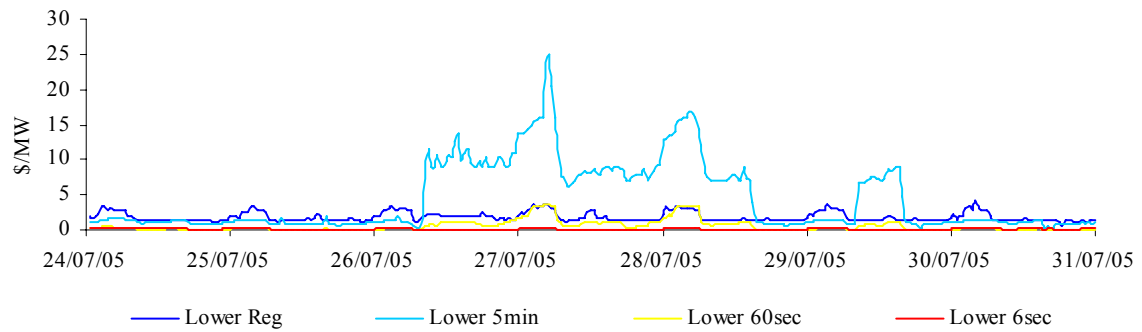
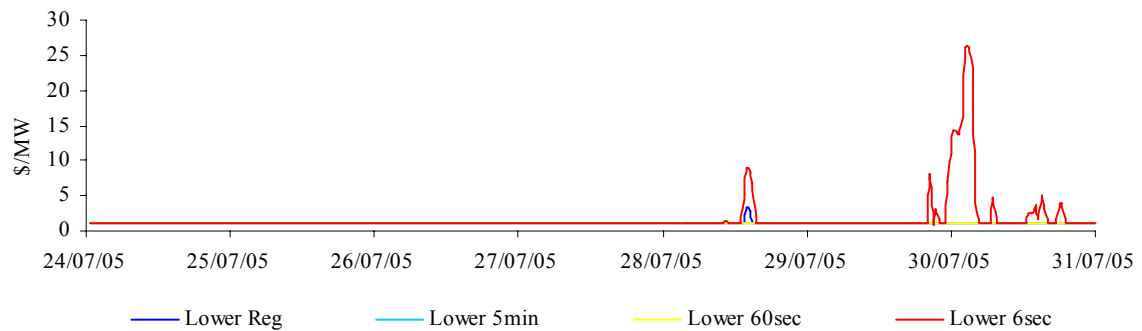


Figure 61A: prices for lower services - Tasmania



Figures 62 and 63 present for both raise and lower services the requirement for each service over the week.

Figure 62: raise requirements

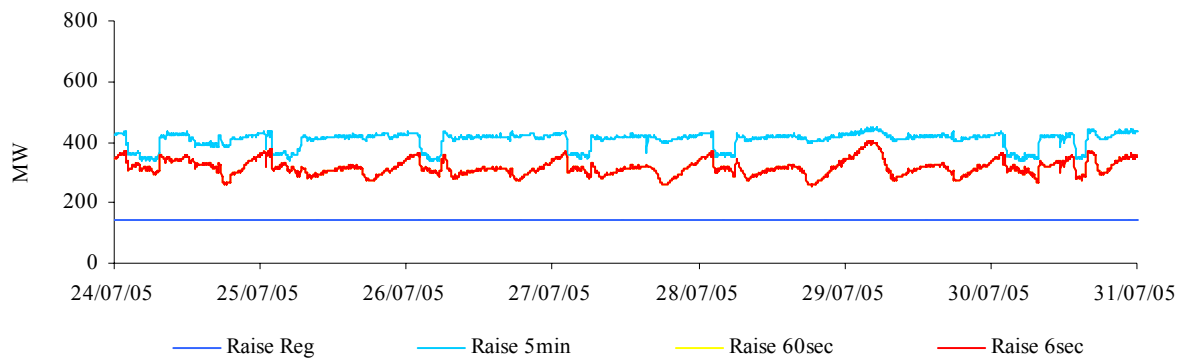


Figure 62A: raise requirements - Tasmania

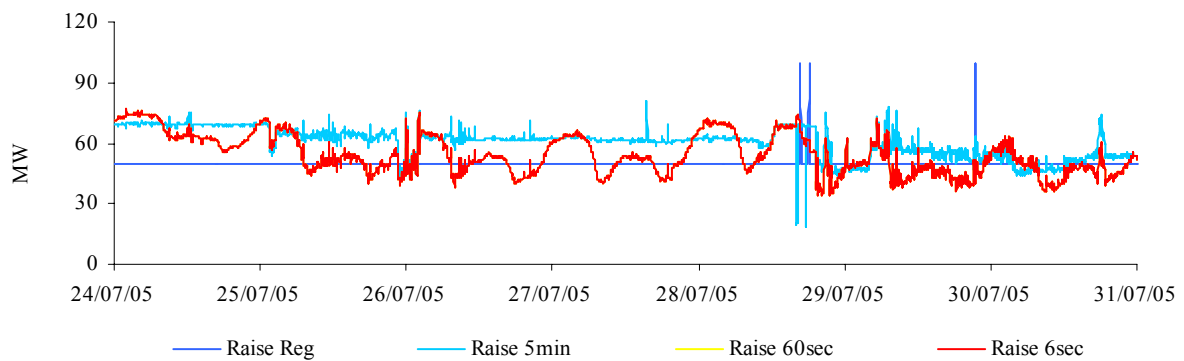


Figure 63: lower requirements

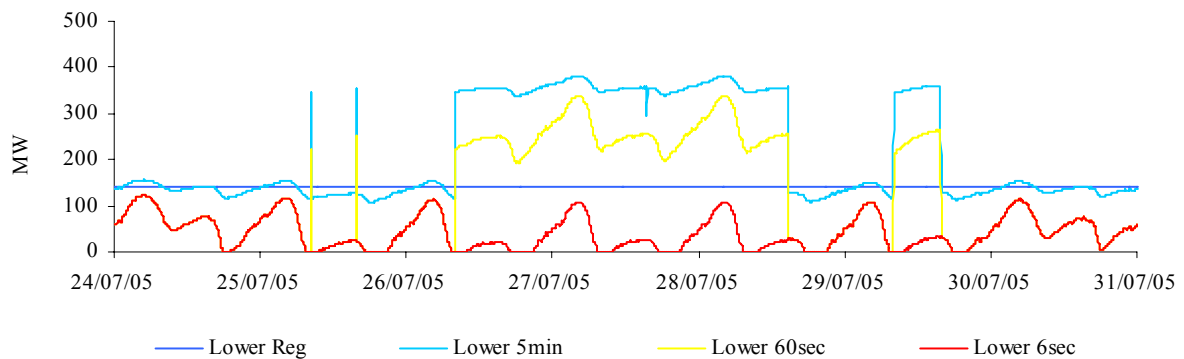


Figure 63A: lower requirements - Tasmania

