

5 – 11 February 2017

Introduction

The AER is required to publish the reasons for significant variations between forecast and actual price and is responsible for monitoring activity and behaviour in the National Electricity Market. The Electricity Report forms an important part of this work. The report contains information on significant price variations, movements in the contract market, together with analysis of spot market outcomes and rebidding behaviour. By monitoring activity in these markets, the AER is able to keep up to date with market conditions and identify compliance issues.

Spot market prices

Figure 1 shows the spot prices that occurred in each region during the week 5 – 11 February 2017.



Figure 1: Spot price by region (\$/MWh)

Figure 2 shows the volume weighted average (VWA) prices for the current week (with prices shown in Table 1) and the preceding 12 weeks, as well as the VWA price over the previous 3 financial years.



Figure 2: Volume weighted average spot price by region (\$/MWh)

Table 1: Volume weighted average spot prices by region (\$/MWh)

Region	Qld	NSW	Vic	SA	Tas
Current week	468	533	129	646	109
15-16 financial YTD	49	46	43	62	67
16-17 financial YTD	106	84	51	126	54

Longer-term statistics tracking average spot market prices are available on the AER website.

Spot market price forecast variations

The AER is required under the National Electricity Rules to determine whether there is a significant variation between the forecast spot price published by the Australian Energy Market Operator (AEMO) and the actual spot price and, if there is a variation, state why the AER considers the significant price variation occurred. It is not unusual for there to be significant variations as demand forecasts vary and participants react to changing market conditions. A key focus is whether the actual price differs significantly from the forecast price either four or 12 hours ahead. These timeframes have been chosen as indicative of the time frames within which different technology types may be able to commit (intermediate plant within four hours and slow start plant within 12 hours).

There were 313 trading intervals throughout the week where actual prices varied significantly from forecasts. This compares to the weekly average in 2016 of 273 counts and the average in 2015 of 133. Reasons for the variations for this week are summarised in Table 2. Based on AER analysis, the table summarises (as a percentage) the number of times when the actual price differs significantly from the forecast price four or 12 hours ahead and the major reason for that variation. The reasons are classified as availability (which means that there is a change in the total quantity or price offered for generation), demand forecast inaccuracy, changes to network capability or as a combination of factors (when there is not one dominant reason). An instance where both four and 12 hour ahead forecasts differ significantly from the actual price will be counted as two variations.

Table 2: Reasons for variations between forecast and actual prices

	Availability	Demand	Network	Combination
% of total above forecast	5	32	0	4
% of total below forecast	29	22	1	8

Note: Due to rounding, the total may not be 100 per cent.

Generation and bidding patterns

The AER reviews generator bidding as part of its market monitoring to better understand the drivers behind price variations. Figure 3 to Figure 7 show the total generation dispatched and the amounts of capacity offered within certain price bands for each 30 minute trading interval in each region.



Figure 3: Queensland generation and bidding patterns

















Frequency control ancillary services markets

Frequency control ancillary services (FCAS) are required to maintain the frequency of the power system within the frequency operating standards. Raise and lower regulation services are used to address small fluctuations in frequency, while raise and lower contingency services are used to address larger frequency deviations. There are six contingency services:

- fast services, which arrest a frequency deviation within the first 6 seconds of a contingent event (raise and lower 6 second)
- slow services, which stabilise frequency deviations within 60 seconds of the event (raise and lower 60 second)
- delayed services, which return the frequency to the normal operating band within 5 minutes (raise and lower 5 minute) at which time the five minute dispatch process will take effect.

The Electricity Rules stipulate that generators pay for raise contingency services and customers pay for lower contingency services. Regulation services are paid for on a "causer pays" basis determined every four weeks by AEMO.

The total cost of FCAS on the mainland for the week was \$2 631 000 or less than one per cent of energy turnover on the mainland.

The total cost of FCAS in Tasmania for the week was \$747 000 or around 4 per cent of energy turnover in Tasmania.

Figure 8 shows the daily breakdown of cost for each FCAS for the NEM, as well as the average cost since the beginning of the previous financial year.



Figure 8: Daily frequency control ancillary service cost

The high raise regulation and raise five minute costs on 10 February are due to participants rebidding FCAS capacity from low to high prices and removing further capacity, to ensure more dispatch in energy. Energy spot prices were above \$5000/MWh at the time. The AER's report into energy prices on the day provides a summary of the key factors contributing to the high prices.¹

AER, Electricity spot prices above \$5000/MWh - New South Wales and Queensland, 10 February 2017

Detailed market analysis of significant price events

Queensland

There were 17 occasions where the spot price in Queensland was greater than three times the Queensland weekly average price of \$468/MWh and above \$250/MWh.

Sunday, 5 February

Table 3: Price, Demand and Availability

Time	Price (\$/MWh)			C	Demand (MW)			Availability (MW)		
	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast	
4 pm	2351.78	13 399.95	13 399.95	7840	7942	7822	10 590	10 670	10 666	

Conditions at the time saw demand and availability around 100 MW lower than forecast four hours ahead.

The lower than forecast price was a result of the lower levels of demand, participants rebidding capacity from high to low prices and imports into Queensland being higher than forecast.

Monday, 6 February

Table 4: Price, Demand and Availability

Time	Price (\$/MWh)			D	Demand (MW)			Availability (MW)		
	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast	
3.30 pm	2532.09	11 096.23	13 399.95	8518	8534	8580	10 736	10 818	10 838	
4 pm	4260.21	11 647.06	13 641.00	8609	8656	8703	10 730	10 788	10 838	
4.30 pm	11 027.91	13 399.95	13 899.95	8761	8781	8812	10 736	10 793	10 843	
5 pm	6318.75	13 399.95	13 641.00	8832	8892	8905	10 747	10 793	10 843	

Conditions at the time saw prices in Queensland aligned with those in New South Wales, with the price exceeding \$5000/MW for the 4.30 pm and 5 pm trading intervals. In accordance with clause 3.13.7 of the Electricity Rules, the AER has issued a separate report into the circumstances that led to the spot price exceeding \$5000/MWh and includes all the above spot prices.²

The report found that the high prices were attributed to high demand for electricity in both New South Wales and Queensland, with Queensland reaching near record levels. The lower than forecast prices were a result of higher than expected imports from Victoria.

AER, Electricity spot prices above \$5000/MWh - New South Wales and Queensland, 6 February 2017

Tuesday, 7 February

Time	Price (\$/MWh)			Demand (MW)			Availability (MW)		
	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast
7 am	2381.04	2148.99	2148.99	7072	7117	7068	11 167	11 283	11 283

Table 5: Price, Demand and Availability

The 7 am price was close to that forecast four and 12 hours ahead.

Thursday, 9 February

Table 6: Price, Demand and Availability

Time	Price (\$/MWh)			Demand (MW)			Availability (MW)		
	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast
4.30 pm	2441.95	298.17	11 584.18	8394	8390	8558	10 774	11 130	11 128
5 pm	4787.61	298.50	12 330.44	8478	8486	8628	10 752	11 115	11 128
5.30 pm	2322.15	186.64	316.31	8503	8460	8588	10 991	11 112	11 133

Conditions at the time saw demand close to that forecast, available capacity lower than forecast and prices higher than forecast four hours ahead.

The higher than forecast prices were a result of higher than forecast demand in New South Wales leading to increased exports from Queensland. This meant that high priced capacity had to be dispatched in Queensland.

AEMO intervened in the market directing Pelican Point power station in South Australia to generate. As AEMO intervened in the market 'What-if pricing' was in place from 3.50 pm to 7 pm in all regions of the NEM.

A summary of the impact of 'what if pricing' and demand forecast error which impacted the Queensland prices can be found in the Electricity spot prices above \$5000/MWh – New South Wales, 9 February 2017 report.³

Friday, 10 February

Table 7: Price, Demand and Availability

Time	Price (\$/MWh)			C	Demand (MW)			Availability (MW)		
	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast	
4 pm	1441.64	13 301.67	13 283.59	8580	8531	8425	10 905	10 894	10 974	
4.30 pm	3460.47	13 308.42	13 288.61	8609	8606	8524	10 904	10 936	10 966	
5 pm	12 221.40	13 319.38	13 303.47	8753	8691	8597	10 895	10 937	10 972	

AER, Electricity spot prices above \$5000/MWh - New South Wales, 9 February 2017

Conditions at the time saw prices aligned with those in New South Wales, see the New South Wales section for details. In accordance with clause 3.13.7 of the Electricity Rules, the AER has issued a separate report into the circumstances that led to the spot price exceeding \$5000/MWh and includes all the above spot prices.⁴

Saturday, 11 February

Table 8: Price, Demand and Availability

Time	F	Price (\$/MW	h)	Demand (MW)			Availability (MW)			
	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast	
3.30 pm	2232.51	11 610.28	10 719.63	8384	8316	8312	10 581	10 756	10 919	
4 pm	3492.28	12 431.00	11 999.02	8515	8445	8461	10 525	10 788	10 914	
4.30 pm	7627.55	13 300.03	13 333.00	8627	8550	8588	10 489	10 743	10 909	
5 pm	8568.90	13 300.03	13 899.95	8691	8764	8687	10 485	10 733	10 919	
5.30 pm	8371.87	13 300.03	12 431.00	8752	8652	8646	10 491	10 743	10 934	

Conditions at the time saw demand and available capacity close to that forecast while spot prices were lower than forecast.

The spot price exceeded 5000/MWh for the 4.30 pm to 5.30 pm trading intervals and in accordance with clause 3.13.7 of the Electricity Rules, the AER has issued a separate report into the circumstances that led to the spot price exceeding 5000/MWh.⁵

The report found that the high prices occurred in Queensland because of high demand and network outages in northern New South Wales.

The spot prices for 3.30 pm and 4 pm were lower than forecast because participants' rebid around 450 MW of capacity from high to low prices.

New South Wales

There were 13 occasions where the spot price in New South Wales was greater than three times the New South Wales weekly average price of \$533/MWh and above \$250/MWh.

Monday, 6 February

5

Table 9: Price, Demand and Availability

Time	Price (\$/MWh)			Demand (MW)			Availability (MW)		
	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast
3.30 pm	2741.78	14 000	13 610.49	13 645	13 437	13 591	13 637	13 880	14 080
4 pm	4686.56	14 000	13 800	13 678	13 488	13 585	13 573	13 864	14 060
4.30 pm	11 692.09	14 000	13 490.08	13 587	13 365	13 318	13 256	13 746	14 060

⁴ AER, Electricity spot prices above \$5000/MWh - New South Wales and Queensland, 10 February 2017

AER, Electricity spot prices above \$5000/MWh - Queensland, 11 February 2017

Time	Price (\$/MWh)			C	Demand (MW)			Availability (MW)		
	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast	
5 pm	6392.31	12 981.21	12 678.75	13 401	13 147	13 111	13 349	13 704	14 044	

Conditions at the time saw New South Wales prices aligned with those in Queensland, see the Queensland section for details.

Thursday, 9 February

Table 10: Price, Demand and Availability

Time	Price (\$/MWh)			Demand (MW)			Availability (MW)		
	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast
4.30 pm	2558.96	299.80	11 077.02	12 516	11 715	11 755	13 173	13 087	12 999
5 pm	7822.25	299.80	11 697.02	12 601	11 797	11 765	12 573	13 130	12 968
5.30 pm	2829.62	190.03	300.06	12 452	11 638	11 565	13 025	13 187	12 962

The price exceeded \$5000/MWh at 5 pm, in accordance with clause 3.13.7 of the Electricity Rules, the AER has issued a separate report into the circumstances that led to the spot price exceeding \$5000/MWh and includes all the above spot prices.⁶

The report found that pricing outcomes in New South Wales were directly related to intervention by the market operator (AEMO) for events in South Australia (see the South Australian section for details). This action triggered special pricing arrangements across the National Electricity Market (NEM).

Friday, 10 February

Table 11: Price, Demand and Availability

Time	Pi	rice (\$/MW	h)	D	emand (M	W)	Availability (MW)		
	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast
4 pm	2088.32	14 000	14 000	13 929	14 596	14 437	13 702	13 538	13 378
4.30 pm	3747.48	14 000	14 000	13 981	14 734	14 581	13 537	13 360	13 325
5 pm	12 914.63	14 000	14 000	13 986	14 674	14 523	12 770	13 286	13 262
5.30 pm	13 966.67	14 000	14 000	13 526	14 493	14 340	12 815	13 363	13 192
6 pm	14 000	14 000	14 000	13 529	14 155	14 000	12 759	13 300	13 124
6.30 pm	4738.51	14 000	14 000	13 388	13 802	13 663	12 549	13 227	13 034

The price exceeded \$5000/MWh for the 5 pm and 5.30 pm trading intervals, in accordance with clause 3.13.7 of the Electricity Rules, the AER has issued a separate report into the

AER, Electricity spot prices above \$5000/MWh - New South Wales, 9 February 2017

circumstances that led to the spot price exceeding \$5000/MWh and includes all the above spot prices.⁷

The report found the high prices were a result of high temperatures in New South Wales and Queensland and an unexpected 1200 MW reduction in New South Wales generation.

From around 4 pm output from Delta Electricity's Vales Point Power Station reduced its output and soon after Energy Australia's Tallawarra Power Station unexpectedly stopped generating. To meet these reductions AEMO instructed Snowy Hydro's Colongra Power Station to start but it was unsuccessful due to technical difficulties.

In response to the local loss of supply, electricity was imported into New South Wales at a rate higher than was safely allowable, resulting in the network becoming insecure. AEMO instructed TransGrid to call on the Tomago aluminium smelter in New South Wales to take one of its pot lines out of service to reduce demand in the state by 290 MW. In accordance with the Electricity Rules, the five-minute price for electricity was set at the market price cap of \$14 000/MWh for the duration of the "load shedding" period in New South Wales only. As a result, the spot price in New South Wales reached \$13 967/MWh at 5.30 pm and \$14 000/MWh at 6 pm.

Victoria

There were two occasions where the spot price in Victoria was greater than three times the Victoria weekly average price of \$129/MWh and above \$250/MWh and there was one occasion where the spot price was below -\$100/MWh.

Thursday, 9 February

Table 12: Price, Demand and Availability

Time	Price (\$/MWh)			Demand (MW)			Availability (MW)		
	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast
6.30 pm	-154.64	97.77	132.91	6836	7751	7852	9828	10 075	10 242

The price was lower than forecast as a result of lower than forecast demand at the time of intervention pricing. Intervention pricing is discussed in the <u>Prices above \$5000/MWh - 9</u> <u>February 2017 (SA)</u> report.

Friday, 10 February

Table 13: Price, Demand and Availability

Time	Price (\$/MWh)			Demand (MW)			Availability (MW)		
	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast
4 pm	1533.20	92.05	192.48	7366	6326	6379	9478	9552	9577
4.30 pm	1050.22	92.05	195.28	7364	6423	6404	9421	9541	9575

Conditions at the time saw demand over 940 MW higher than forecast while availability was around 100 MW lower than forecast four hours ahead.

AER, Electricity spot prices above \$5000/MWh - New South Wales and Queensland, 10 February 2017

At 3.37 pm, effective from 3.45 pm, Snowy Hydro rebid 1230 MW of capacity at its Murray power station priced at \$450/MWh to \$13 994/MWh. The reason given was "15:36:35 A avoid uneconomic dispatch: bid price is circa \$450, whereas the actual dispatch price is \$391.02". The price then increased above \$3700/MWh for two dispatch intervals. In response to the high prices participants, including Snowy Hydro, rebid around 900 MW of capacity from high to low prices for the remainder of the trading interval and the dispatch price fell to \$11/MWh at 3.55 pm.

At the start of the 4.30 pm trading interval Snowy Hydro's 3.37 pm was still effective and the dispatch price increased to \$6128/MWh by 4.10 pm. At 4.08 pm, effective from 4.15 pm, Snowy Hydro rebid 1279 MW of capacity at Murray from \$13 994/MWh to the floor and the price decreased to \$11/MWh and remained below this level for the remainder of the trading interval.

South Australia

There were 14 occasions where the spot price in South Australia was greater than three times the South Australia weekly average price of \$646/MWh and above \$250/MWh.

Wednesday, 8 February

Table 14: Price, Demand and Availability

Time	Price (\$/MWh)			D	emand (M	W)	Availability (MW)		
	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast
3.30 pm	2619.60	350.69	350.69	2677	2415	2283	2657	2696	2614
5 pm	2481.99	353.12	440.47	2979	2706	2545	2484	2608	2550
5.30 pm	11 141.35	578.81	589.99	3007	2732	2625	2374	2568	2527
6 pm	13 160.01	578.81	589.99	3046	2733	2660	2334	2522	2514
6.30 pm	13 440.01	578.81	589.99	2946	2715	2685	2337	2492	2523
7 pm	9387.38	1750.05	578.81	2876	2807	2666	2349	2487	2519
7.30 pm	13 400.01	13 100.02	578.81	3009	2791	2588	2311	2531	2556

The price exceeded 5000/MWh for the 5.30 pm to 7.30 pm trading intervals, in accordance with clause 3.13.7 of the Electricity Rules, the AER has issued a separate report into the circumstances that led to the spot price exceeding 5000/MWh and includes all the above spot prices.⁸

The report found the high prices were a result of two main factors. First, the dispatch of high priced electricity generation to satisfy unforecast high levels of demand, driven by high temperatures (5.30 pm, 6 pm and 7.30 pm). Second, action by the market operator to shed load (6.30 pm and 7 pm).

From 5.25 pm, flows across Murraylink increased above its import limit resulting in the power system moving to an insecure state. AEMO must take all reasonable actions, including

⁸ AER, Electricity spot prices above \$5000/MWh - South Australia, 8 February 2017

directing generators not currently operating or interrupting customers to return the power system to a secure operating state within 30 minutes.

Around 6 pm, without other alternatives, AEMO issued a direction to the South Australia transmission network service provider (ElectraNet) to shed 100 MW of load to return the power system to a secure state and reduce flows on the Murraylink interconnector to within limits. Under the National Electricity Rules, when load shedding occurs, prices are set at the market price cap (\$14 000/MWh).

Thursday, 9 February

Table 15: Price, Demand and Availability

Time	Price (\$/MWh)			D	emand (M	W)	Availability (MW)		
	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast
4.30 pm	2481.17	14 000	14 000	2772	2901	2921	2685	2542	2550
5 pm	6755	13 168.02	14 000	2824	2931	2956	2660	2562	2555
5.30 pm	8957.71	13 168.02	14 000	2845	2972	2996	2657	2573	2543
6.30 pm	9509.52	578.81	13 998.99	2932	2962	2977	2662	2674	2602

The price exceeded \$5000/MWh for the 5 pm to 6.30 pm trading intervals, in accordance with clause 3.13.7 of the Electricity Rules, the AER has issued a separate report into the circumstances that led to the spot price exceeding \$5000/MWh and includes all the above spot prices.⁹

The report found the high prices were a result of high priced generation being needed to meet the predicted high levels of demand. Despite demand being lower than forecast, actual prices were determined by special pricing arrangements following directions by AEMO to Engie to start previously unavailable generating plant. Special pricing arrangements apply following an intervention to maintain the market price signal by determining prices as if no action had been taken. AEMO's direction to Pelican Point Power Station, triggered these arrangements.

Friday, 10 February

Table 16: Price, Demand and Availability

Time	Price (\$/MWh)			Demand (MW)			Availability (MW)		
	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast
3.30 pm	2112.80	10 585.99	10 585.99	2629	2526	2522	2662	2568	2521
4 pm	1945.88	10 585.99	10 585.99	2713	2565	2555	2597	2567	2513
6 pm	1998.64	351.49	10 585.99	2761	2648	2645	2501	2549	2480

Conditions for the 3.30 pm and 4 pm trading intervals saw demand over 100 MW higher than forecast and availability between 30 MW and 95 MW higher than forecast four hours ahead.

⁹ AER, Electricity spot prices above \$5000/MWh - South Australia, 9 February

The lower than forecast prices for these trading intervals were the result of participants rebidding capacity from prices greater than \$12 500/MWh to prices less than \$100/MWh.

Conditions for the 6 pm trading interval saw demand 113 MW higher than forecast while availability was slightly lower than forecast four hours ahead.

The decrease in forecast price from 12 hours to four hours is the result of participants offering in additional low priced capacity and small amounts of capacity rebid from high to low prices.

At 5.50 pm demand increased by around 33 MW while imports from Victoria decreased by around 60 MW. With cheaper priced generation ramp rate limited, high priced generation at Torrens Island was dispatched and the price increased to \$10 586/MWh, resulting in the higher than forecast spot price.

Tasmania

There was one occasion where the spot price in Tasmania was greater than three times the Tasmania weekly average price of \$109/MWh and above \$250/MWh and there was one occasion where the spot price was below -\$100/MWh.

Thursday, 9 February

Table 17: Price, Demand and Availability

Time	Price (\$/MWh)			Demand (MW)			Availability (MW)		
	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast
6.30 pm	-149.43	88.67	107.28	1109	1125	1112	2227	2197	2206

Conditions at the time saw demand and availability close to forecast four hours ahead.

At 5.17 pm Hydro Tasmania rebid over 1000 MW of capacity across its portfolio to the price floor. The reason given was "1706A price different from forecast: Vic". The rebid combined with co-optimisation of FCAS and energy resulted in the price ranging from -\$919/MWh to \$24/MWh for the 6.30 pm trading interval

Friday, 10 February

Table 18: Price, Demand and Availability

Time	Price (\$/MWh)			Demand (MW)			Availability (MW)		
	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast
4.30 pm	941.97	87.73	100.73	1079	1093	1095	2157	2141	2145

Conditions at the time saw demand and availability close to that forecast four hours ahead.

At 4.10 pm the dispatch price increased to \$5480/MWh due to a 148 MW increase in exports to Victoria as a result of an increase in demand in New South Wales, see New South Wales section for details.

Financial markets

Figure 9 shows for all mainland regions the prices for base contracts (and total traded quantities for the week) for each quarter for the next four financial years.



Figure 9: Quarterly base future prices Q1 2017 – Q4 2020

Source. ASXEnergy.com.au

Figure 10 shows how the price for each regional quarter 1 2017 base contract has changed over the last 10 weeks (as well as the total number of trades each week). The closing quarter 1 2015 and quarter 1 2016 prices are also shown. The AER notes that data for South Australia is less reliable due to very low numbers of trades.





Note. Base contract prices are shown for each of the current week and the previous 9 weeks, with average prices shown for periods 1 and 2 years prior to the current year.

Source. ASXEnergy.com.au

Prices of other financial products (including longer-term price trends) are available in the <u>Industry Statistics</u> section of our website.

Figure 11 shows how the price for each regional Quarter 1 2017 cap contract has changed over the last 10 weeks (as well as the total number of trades each week). The closing quarter 1 2015 and quarter 1 2016 prices are also shown.



Figure 11: Price of Q1 2017 cap contracts over the past 10 weeks (and the past 2 years)

Australian Energy Regulator August 2017