Weekly Gas Market Report

8–14 July 2012

Weekly summary

Average daily prices in each market were above \$5/GJ. Notably, prices in all four markets were lower in the second half of the week than in the first half of the week.

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The 2012-13 financial year-to-date (FYTD) price to July 14 in Victoria, Sydney and Adelaide was approximately twice the FYTD price in these markets over the first two weeks of 2011-12.

Long term statistics and explanatory material

A range of longer term data covering gas prices, flows and demand is available on the AER's website at <u>http://www.aer.gov.au/node/456</u>. Also available on the AER's website at <u>http://www.aer.gov.au/node/451</u> is a document explaining how to interpret the data provided in each weekly gas market report.

Market overview

Figure 1 sets out the average daily prices (\$/GJ) in the Victorian Declared Wholesale Market (VGM or Victorian gas market) and for the Sydney (SYD), Adelaide (ADL) and Brisbane (BRI) Short Term Trading Market hubs (STTM) for the current week compared to historical averages.

Figure 1: Average daily prices – all markets (\$/GJ)¹

	Victoria	Sydney	Adelaide	Brisbane
08 Jul - 14 Jul 2012	5.55	6.82	6.91	5.42
% change from previous week	-32	-4	-24	-15
12-13 financial YTD	6.85	6.98	7.99	5.92
% change from previous financial YTD	88	100	99	-

Figure 2 compares average weekly gas prices, ancillary market payments and scheduled injections against historical averages for the Vic gas market.

Figure 2: Victorian gas market

	Price (\$/GJ)	Ancillary payments (\$000)	BOD forecast demand quantity (TJ)
08 Jul - 14 Jul 2012	5.55	-	949
% change from previous week	-32	-	-10
12-13 financial YTD	6.85	-	1000
% change from previous financial YTD	88	-	0

*Note: From February 18, only positive ancillary payments, reflecting system constraints will be shown here More detailed analysis on the Victorian declared wholesale market is provided in Section 1.

The weighted average daily imbalance price applies for Victoria.

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Figures 3 to 5 show average ex ante and ex post gas prices, MOS balancing gas service payments together with the related daily demand quantities against historical averages for the Sydney, Adelaide and Brisbane wholesale gas markets, respectively.

Figure 3: Sydney STTM

	Ex ante price (\$/GJ)	Ex post price (\$/GJ)	MOS payments (\$000)	Ex ante quantity (TJ)	Ex post quantity (TJ)
08 Jul - 14 Jul 2012	6.82	6.27	26.20	288	283
% change from previous week	-4	-10	33	-10	-10
12-13 financial YTD	6.98	6.63	22.40	304	298
% change from previous financial YTD	100	135	-76	1	4

Figure 4: Adelaide STTM

	Ex ante price (\$/GJ)	Ex post price (\$/GJ)	MOS payments (\$000)	Ex ante quantity (TJ)	Ex post quantity (TJ)
08 Jul - 14 Jul 2012	6.91	6.68	5.81	94	90
% change from previous week	-24	-35	-57	-9	-14
12-13 financial YTD	7.99	8.51	10.32	98	98
% change from previous financial YTD	99	102	-22	9	5

Figure 5: Brisbane STTM

	Ex ante price (\$/GJ)	Ex post price (\$/GJ)	MOS payments (\$000)	Ex ante quantity (TJ)	Ex post quantity (TJ)
08 Jul - 14 Jul 2012	5.42	4.77	1.84	160	157
% change from previous week	-15	-14	-73	-4	-3
From market start (1 Dec)	5.92	5.14	4.73	163	160

More detailed analysis of the STTM hubs is found in sections 2 to 4.

Section 5 provides analysis on production and pipeline flows on the National Gas Bulletin Board, as well as gas-powered generation volumes in each state.

Significant Market Events or Issues this week

Despite prices being lower than the previous week, the price exceeded \$7/GJ in each market on a number of days. The AER will publish a significant event report for the month of July, which will include further analysis of some of these gas days.

On a number of days of high Victorian demand, to maintain system security AEMO placed varying withdrawal limits on gas exports at Culcairn, thus limiting flows to NSW. On any given day, around 50 TJ of withdrawal bids were submitted at high prices at Culcairn (as shown in figure 1.4). As a result of the limitations imposed by the withdrawal limits, some participants' exports were constrained.

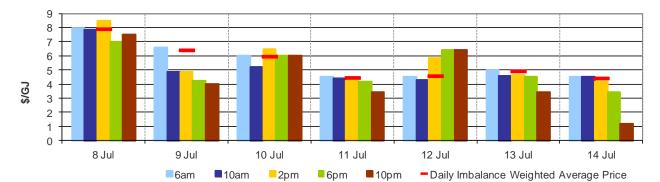
Detailed Market Analysis

8–14 July 2012

1 Victorian Declared Wholesale Market

In the Victorian Gas Market gas is priced five times daily at 6 am, 10 am, 2 pm, 6 pm and 10 pm. However, the volume weighted gas price on a gas day tends towards the 6 am price which is the schedule at which most gas is traded.

The main drivers of price are demand forecasts together with bids to inject or withdraw gas from the market. For each of the five gas day pricing schedules, figures 1.1 to 1.4 below show the daily prices, demand forecasts², and injection/withdrawal bids³. Figure 1.5 provides information on which system injection points were used to deliver gas, in turn indicating the location and relative quantity of gas bids cleared through the market. Gas is priced five times daily (at 6 am, 10 am, 2 pm, 6 pm and 10 pm) when the first schedule and four reschedules apply, while the last 8-hour schedule has been separated into two 4-hour blocks for a consistent comparison with other scheduled injection volumes. The main drivers of price are demand forecasts and gas bids.⁴





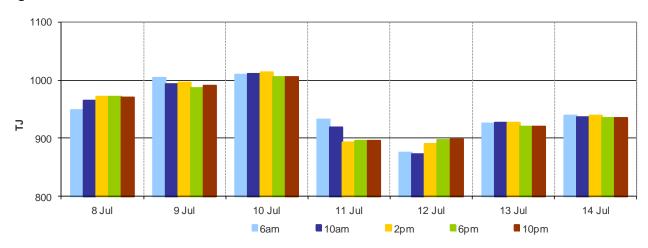


Figure 1.2: Demand forecasts

² These are Market Participants' aggregate demand forecasts adjusted for any override as applied by AEMO from time to time. The main driver of the amount of gas scheduled on a gas day are these forecasts which are forecasts that cannot respond to price or in other words is gas delivered regardless of the price.

³ The price might also be affected by transmission or production (contractual) constraints limiting how much gas can be delivered from a locale or System Injection Point (SIP) from time to time.

⁴ The price might also be affected by transmission or production (contractual) constraints limiting how much gas can be delivered from a locale or SIP from time to time.

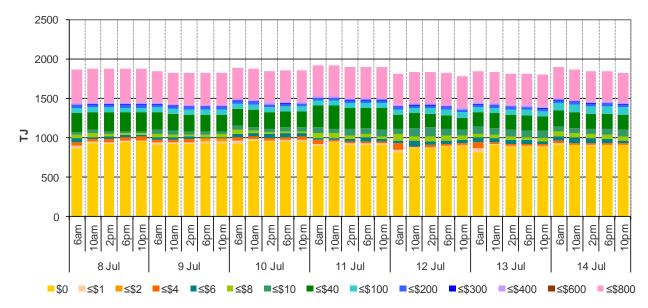


Figure 1.3: Injection bids by price bands

Figure 1.4: Withdrawal bids by price bands

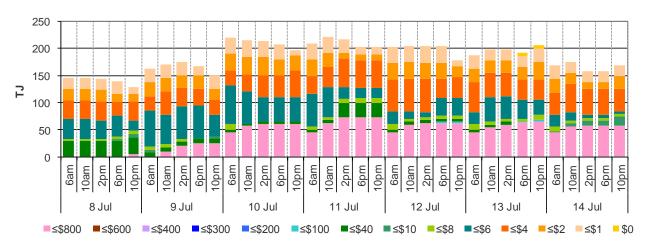
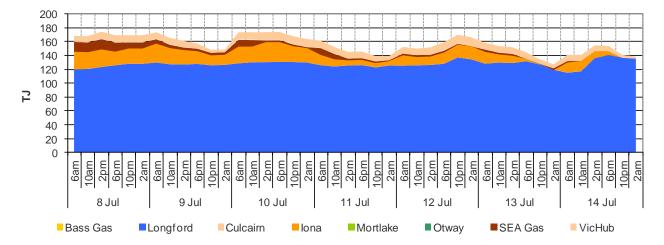


Figure 1.5: Metered Injections by System Injection Point



2 Sydney STTM

In each STTM hub, gas is priced once before each gas day (the ex ante price) and once after the gas day (the ex post price). The main drivers of ex ante and ex post prices are demand forecasts, together with participant offers and offers to inject or bids to withdraw gas traded through the hub.⁵ Prices before and after the gas day may also vary depending on how much gas is scheduled before the gas day (setting the ex ante price) and how much gas is consumed in the hub on a gas day (setting the ex post price).

Market Operator Service balancing gas (MOS) payments arise because the amount of gas nominated on pipelines for delivery on a gas day will either exceed or fall short, by some amount, of the amount of gas consumed in the hub. In such circumstances, MOS payments are made to participants for providing a service to park gas on a pipeline or to loan gas from a pipeline to the hub.⁶

Figures 2.1 and 2.2 show daily prices, demand, offers and bids. Figures 2.3 and 2.4 show gas scheduled and allocated on pipelines, indicating the location and relative quantity of gas offers across pipelines and also the amount of MOS allocated for each pipeline.

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Ex ante price (\$/GJ)	8.03	8.03	8.03	7.15	5.99	5.02	5.52
Ex ante quantity (TJ)	280	303	302	290	300	274	269
Ex post price (\$/GJ)	4.63	8.03	8.02	7.15	5.99	5.02	5.02
Ex Post quantity (TJ)	259	303	296	290	304	270	258

Figure 2.1: SYD STTM daily ex ante and ex post prices and quantities

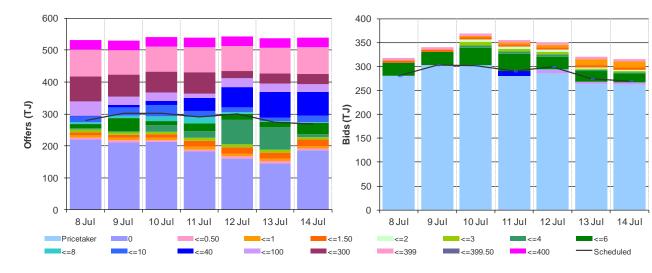
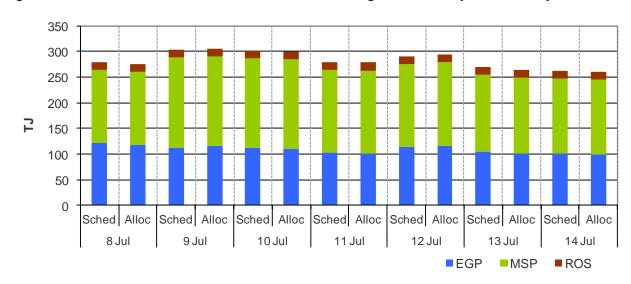


Figure 2.2 (a) Daily hub offers in price bands (\$/GJ) Figure 2.2(b): Daily hub bids in price bands (\$/GJ)

⁵ The main driver of the amount of gas scheduled on a gas day is the 'price-taker' bid, which is forecast hub demand that cannot respond to price and which must be delivered, regardless of the price.

⁶ MOS payments involve a payment for a MOS decrease service when the quantity delivered exceeds actual final gas nominations and a MOS increase applies otherwise. As well as a MOS service payment, as shown in figure 2.4 MOS providers are paid for or pay for the quantity of MOS sold into the market or bought from the market.



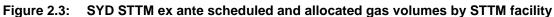
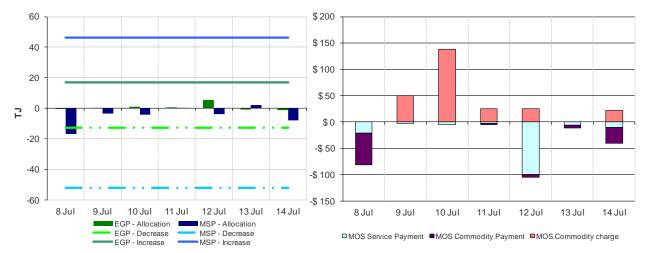




Figure 2.4 (b): Service payments and commodity payments/charges (\$000)



3 Adelaide STTM

The Adelaide STTM hub functions in the same way as the Sydney STTM hub. The same data that was presented for the Sydney hub is presented for the Adelaide hub in the figures below.

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Ex ante price (\$/GJ)	7.82	8.50	7.82	7.71	5.49	5.17	5.84
Ex ante quantity (TJ)	89	98	100	96	93	97	86
Ex post price (\$/GJ)	7.82	7.82	7.82	7.10	5.17	5.17	5.84
Ex Post quantity (TJ)	87	95	95	95	85	90	86

Figure 3.1: ADL STTM daily ex ante and ex post prices and quantities

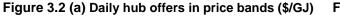


Figure 3.2(b): Daily hub bids in price bands (\$/GJ)

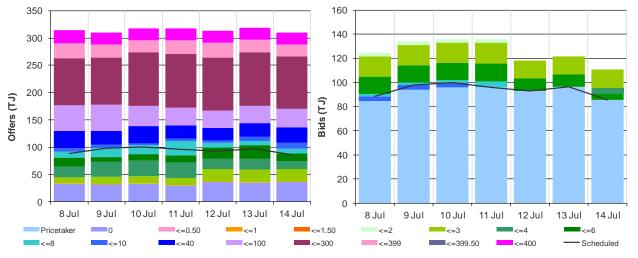
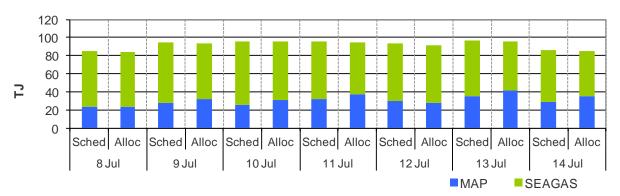
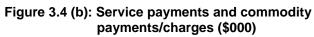
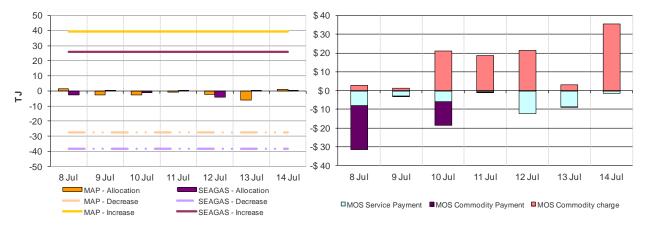


Figure 3.3: ADL STTM ex ante scheduled and allocated gas volumes by STTM facility









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4 **Brisbane STTM**

The Brisbane STTM hub functions in the same way as the Sydney STTM hub. The same data that was presented for the Sydney hub is presented for the Brisbane hub in the figures below.

Figure 4.1:	BRI STTM daily ex ante and ex post prices and quantities	
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	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Ex ante price (\$/GJ)	4.45	7.55	8.22	4.50	4.51	4.10	4.63
Ex ante quantity (TJ)	145	172	171	167	164	163	137
Ex post price (\$/GJ)	3.99	4.00	8.22	4.50	4.45	3.60	4.63
Ex Post quantity (TJ)	144	169	170	168	163	151	134

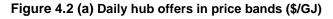
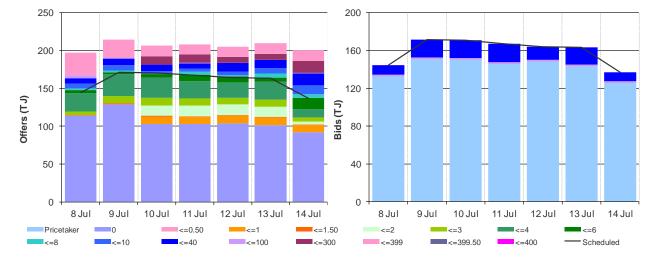
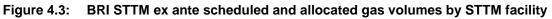
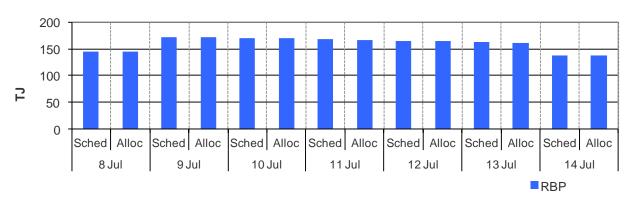


Figure 4.2(b): Daily hub bids in price bands (\$/GJ)









40

30

20

10

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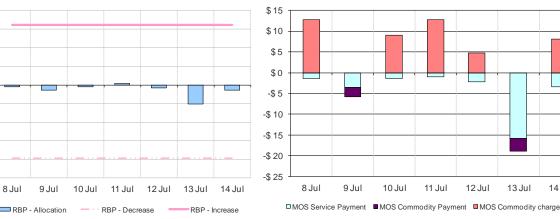
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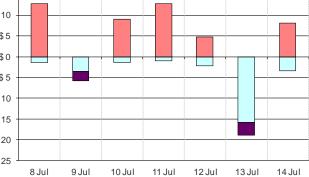
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Figure 4.4 (b): Service payments and commodity payments/charges (\$000)

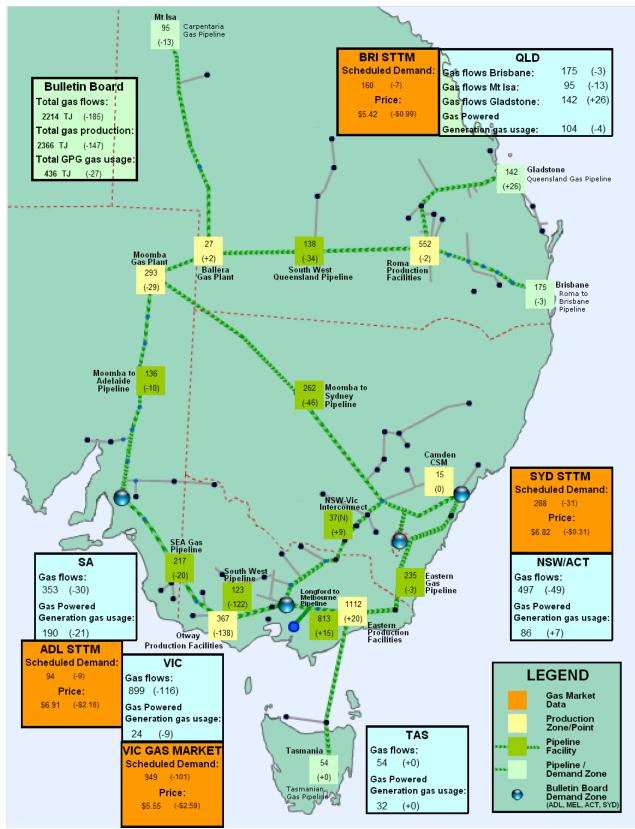




5 National Gas Bulletin Board

Figure 5.1 shows average daily actual flows for the current week in the aqua boxes⁷ from the Bulletin Board (changes from the previous week's average are shown in brackets). Gas-powered generation (GPG) gas usage is also shown in each region in the aqua boxes. In the orange boxes average daily scheduled volumes and prices for each gas market are provided.





⁷ Regional Gas Flows: **SA** = MAP + SEAGAS, **VIC** = SWP + LMP – negative(NSW-VIC), **NSW/ACT** = EGP + MSP, **TAS** = TGP, **QLD** (**Brisbane**) = RBP, **QLD** (**Mt Isa**) = CGP, **QLD** (**Gladstone**) = QGP

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