

23 – 29 June 2013

Weekly summary

The Price in Brisbane gradually declined throughout the week from \$8/GJ to below \$7/GJ. The price in Sydney reached \$9.50/GJ on Tuesday 25 June, with the hub seeing its highest level of demand this winter at around 330 TJ. Cold temperatures continued in Victoria during the start of the week, seeing the imbalance price reach just below \$7/GJ on Monday 24 June. Prices in Adelaide were steady at around \$6/GJ this week, however large MOS costs exceeding \$100 000 accrued from 24 June.

Long term statistics and explanatory material

The AER has published an [explanatory note](#) to assist with interpreting the data presented in its weekly gas market reports. The AER also publish a range of [longer term statistics](#) on the performance of the gas sector including gas prices, production, pipeline flows and consumer demand.

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
23 Jun - 29 Jun 2013	5.46	7.12	5.83	7.35
% change from previous week	12	18	2	13
12-13 financial YTD	4.49	5.20	5.09	5.91
% change from previous financial YTD	37	51	34	69

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)
23 Jun - 29 Jun 2013	5.46	-	1001
% change from previous week	12	-100	1
12-13 financial YTD	4.49	-	569
% change from previous financial YTD	37	-	-2

* Note: 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.

¹ The weighted average daily imbalance price applies for Victoria.

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)
23 Jun - 29 Jun 2013	7.12	6.36	18.85	298	293
% change from previous week	18	-1	153	-1	-5
12-13 financial YTD	5.20	5.37	10.79	241	240
% change from previous financial YTD	51	68	-73	2	4

Figure 4: Adelaide STTM

	Ex ante price (\$/GJ)	Ex post price (\$/GJ)	MOS payments (\$000)	Ex ante quantity (TJ)	Ex post quantity (TJ)
23 Jun - 29 Jun 2013	5.83	5.54	100.89	98	91
% change from previous week	2	-4	233	2	-6
12-13 financial YTD	5.09	5.03	11.69	69	67
% change from previous financial YTD	34	34	15	1	0

Figure 5: Brisbane STTM

	Ex ante price (\$/GJ)	Ex post price (\$/GJ)	MOS payments (\$000)	Ex ante quantity (TJ)	Ex post quantity (TJ)
23 Jun - 29 Jun 2013	7.35	7.01	1.01	149	149
% change from previous week	13	-9	-54	25	21
12-13 financial YTD	5.91	5.97	2.38	143	142

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

Higher Victorian demand

Demand in Victoria remained above 1 PJ up until the end of the week, with demand on the Monday 24 June gas day reaching 1.2 PJ following minimum temperatures of below 3 degrees over the weekend. Similar to the previous week, the 2 pm price reached \$8.20/GJ on this day, with low linepack levels seeing the requirement for LNG notified from 3 pm. A network flow transmission constraint (NFTC) was also invoked at Iona underground storage due to capacity limitations of the South West Pipeline.

Record MOS quantities required in Adelaide

Pipeline demand levels in the Adelaide hub were above 100 TJ from Monday to Wednesday, with the continued high demand keeping prices around \$6/GJ (around \$1/GJ higher than levels seen a fortnight ago). Counter-acting MOS also continued throughout the week, with volumes exceeding those previously observed in the hub, resulting in significant MOS service payments accruing on 25, 26 and 27 June.

On Tuesday 25 June, net flows to the hub on the MAP fell below 7 TJ during a time of high demand (close to 110 TJ). At the same time, deliveries scheduled to the hub on the SEAGas pipeline were at the highest level seen since market start (86.5 TJ). Record MOS requirements saw 19.7 TJ of increase services delivered on the MAP, while 21 TJ of decrease services were delivered on SEAGas. The 40 TJ requirement resulted in service payments reaching a total of \$252 272. High network demand and low flows on MAP occurred on 26 and 27 June also when there were high MOS service payments of \$182 736 and \$111 956 respectively.

The MOS payment in excess of \$250 000 on 25 June exceeded the MOS service payment threshold set out in the AER's Significant Price Variation (SPV) Guideline². Under Rule 498 of the National Gas Rules, the AER will publish a separate report covering the events surrounding the high MOS service payments in further detail.

² <http://www.aer.gov.au/node/18400>

Detailed Market Analysis

18 – 22 June 2013

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 forecasts³, and injection/withdrawal bids⁴. 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.⁵

Figure 1.1: Prices by schedule

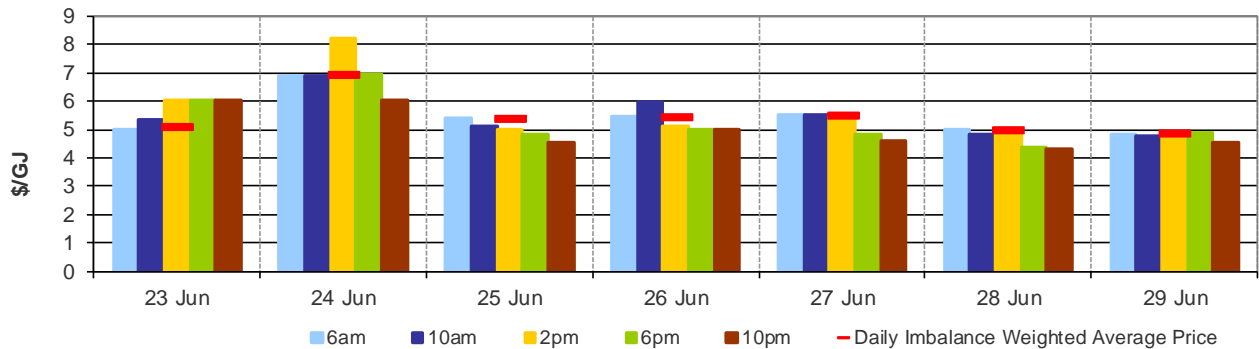
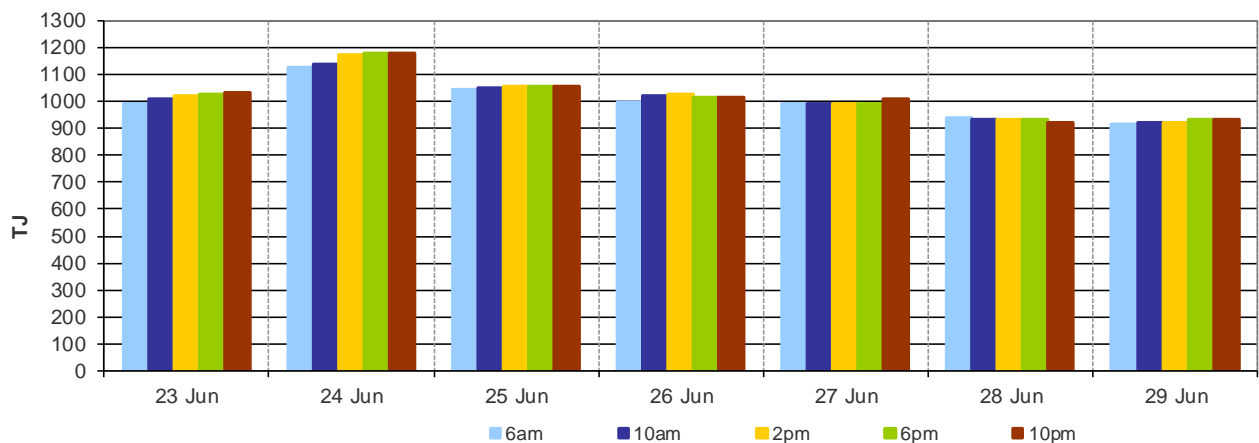


Figure 1.2: Demand forecasts



³ 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.

⁴ 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.

⁵ 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

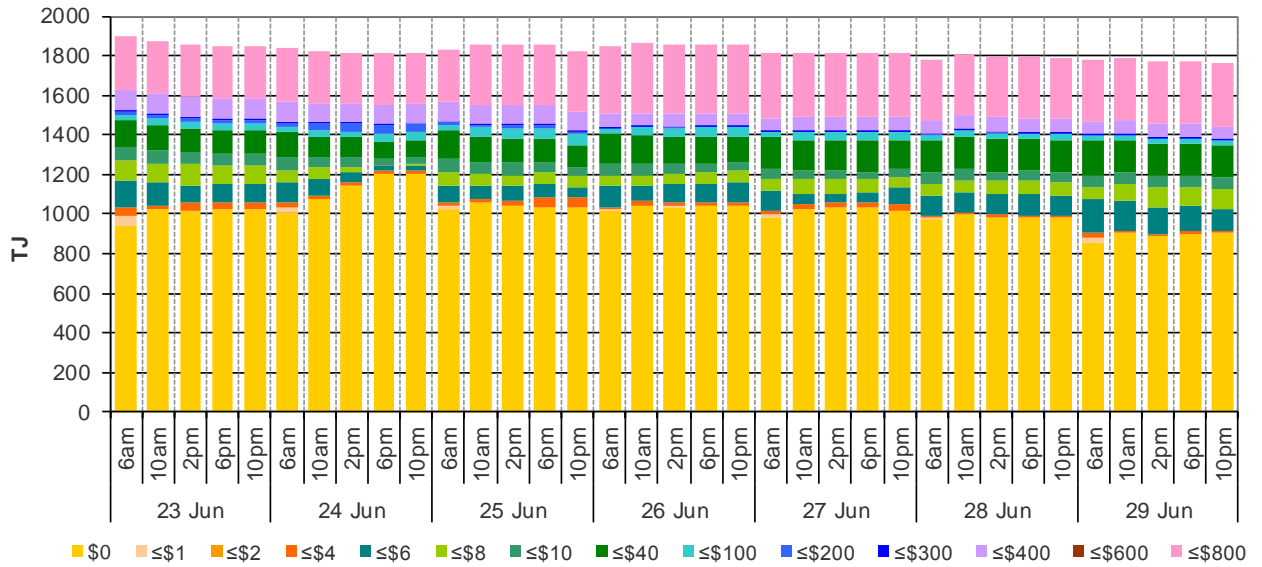


Figure 1.4: Withdrawal bids by price bands

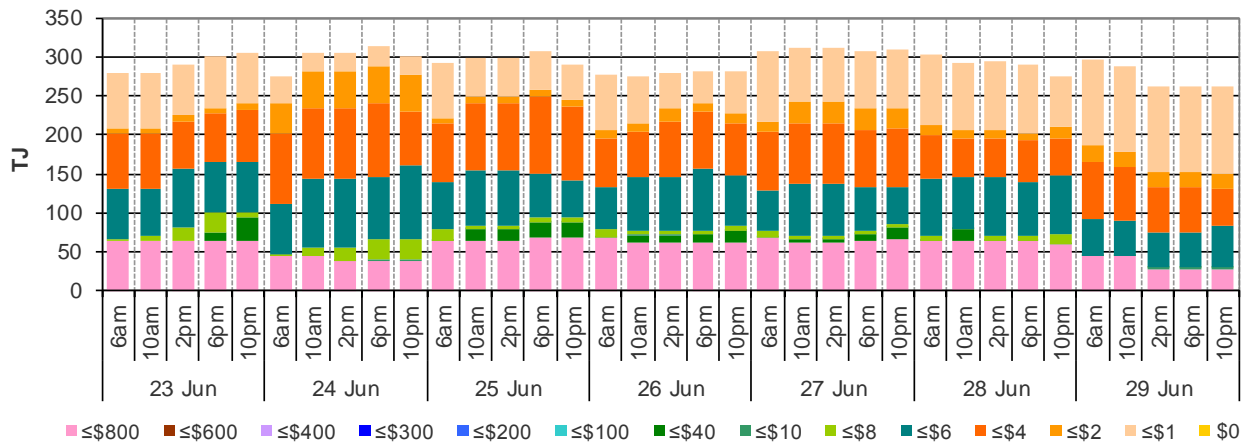
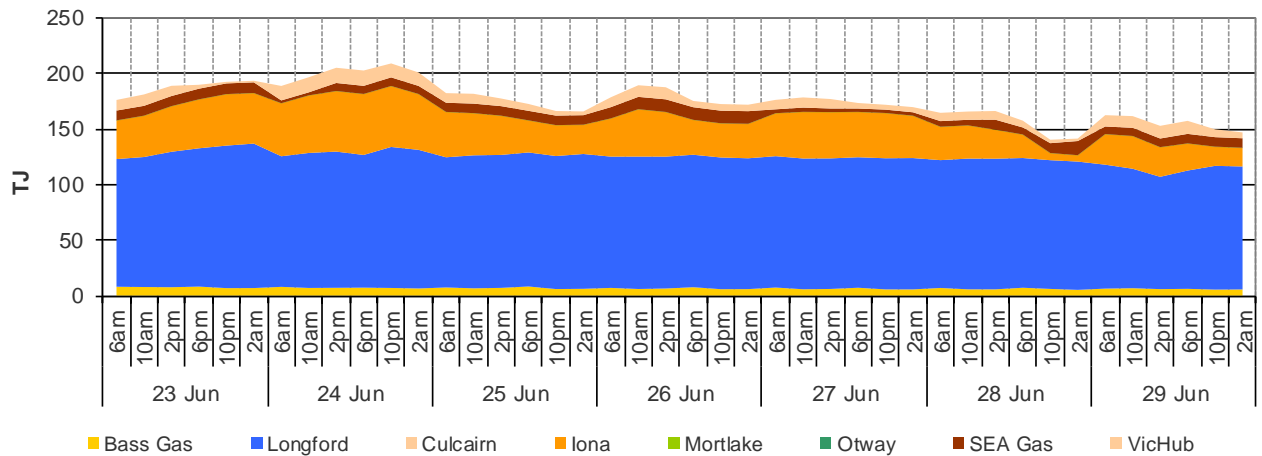


Figure 1.5: Metered Injections by System Injection Point



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.⁶ 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.⁷

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.

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

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Ex ante price (\$/GJ)	6.46	7.99	9.50	6.47	6.48	6.45	6.48
Ex ante quantity (TJ)	268	320	330	321	301	284	264
Ex post price (\$/GJ)	7.99	7.99	6.98	5.00	5.00	5.07	6.48
Ex Post quantity (TJ)	293	323	315	288	285	281	264

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

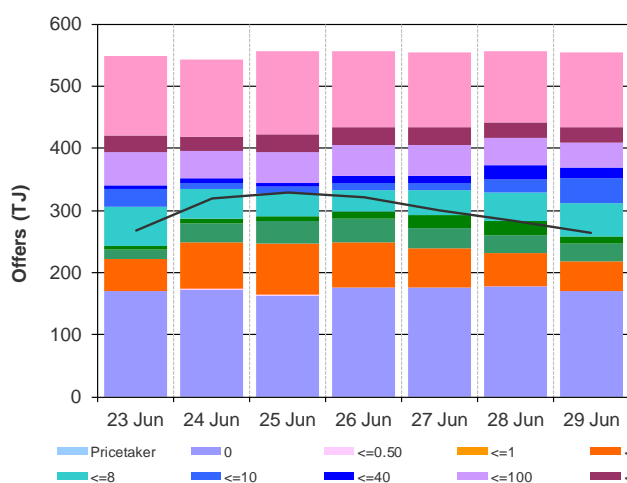
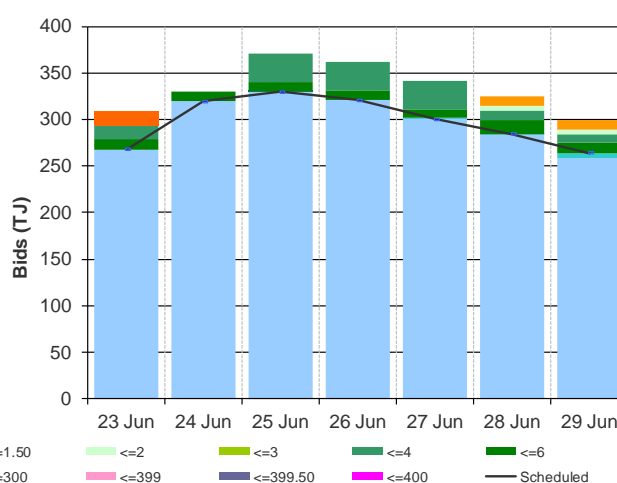


Figure 2.2(b): Daily hub bids in price bands (\$/GJ)



⁶ 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.

⁷ MOS service payments involve a payment for a MOS increase service when the actual quantity delivered exceeds final gas nominations for delivery to a hub, and a payment for a MOS decrease service when the actual quantity delivered is less than final nominations. 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 2.3: SYD STTM ex ante scheduled and allocated gas volumes by STTM facility

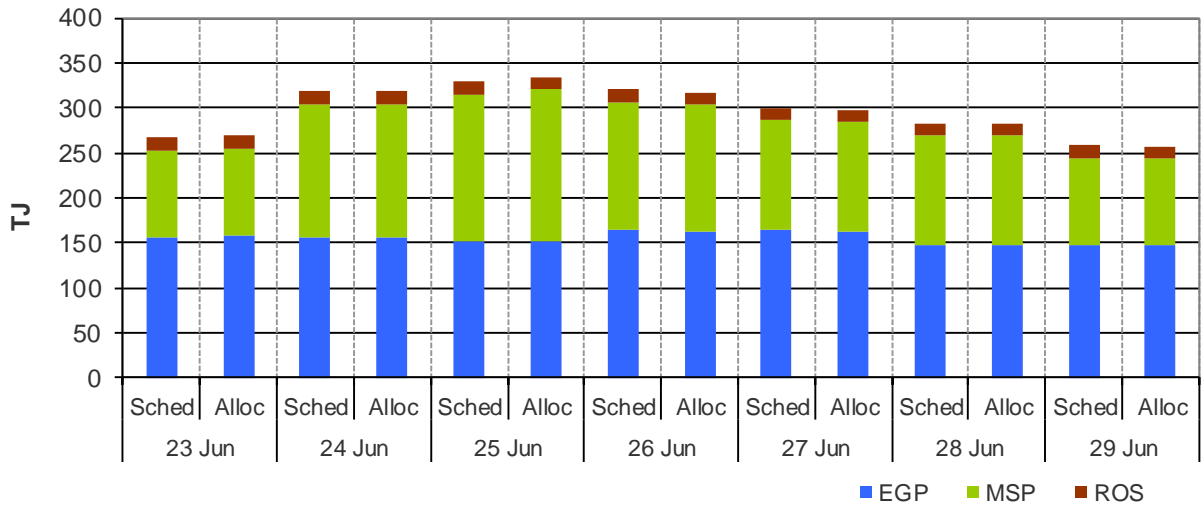


Figure 2.4 (a) SYD STTM MOS allocations (TJ)

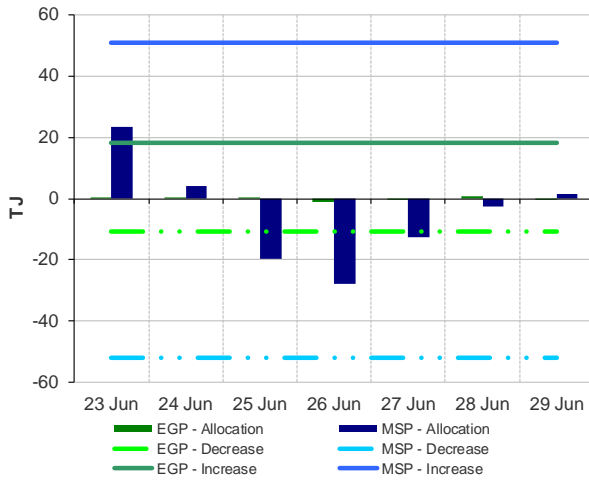
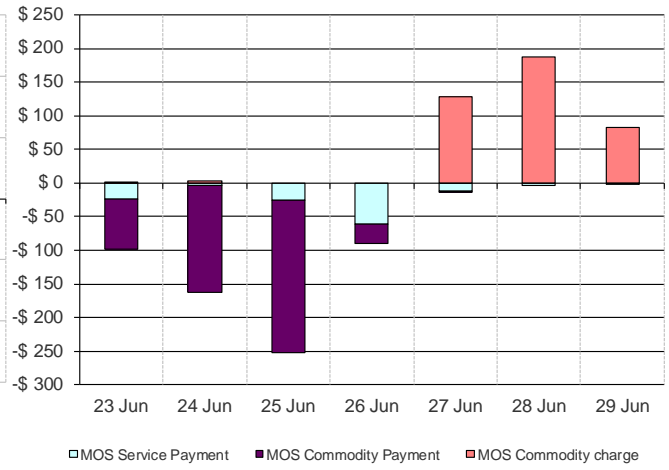


Figure 2.4 (b): Service payments and commodity payments/charges (\$000)



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.

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

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Ex ante price (\$/GJ)	5.92	5.92	4.93	6.00	6.02	6.02	6.02
Ex ante quantity (TJ)	93	107	110	101	94	94	88
Ex post price (\$/GJ)	4.93	4.93	4.93	6.00	6.01	6.00	6.00
Ex Post quantity (TJ)	88	93	108	102	83	83	83

Figure 3.2 (a) Daily hub offers in price bands (\$/GJ)

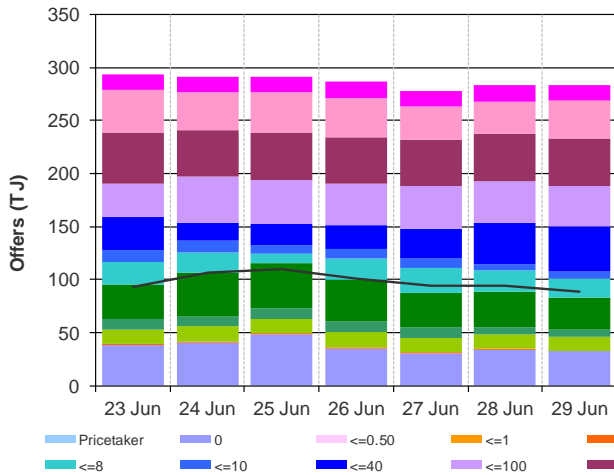


Figure 3.2(b): Daily hub bids in price bands (\$/GJ)

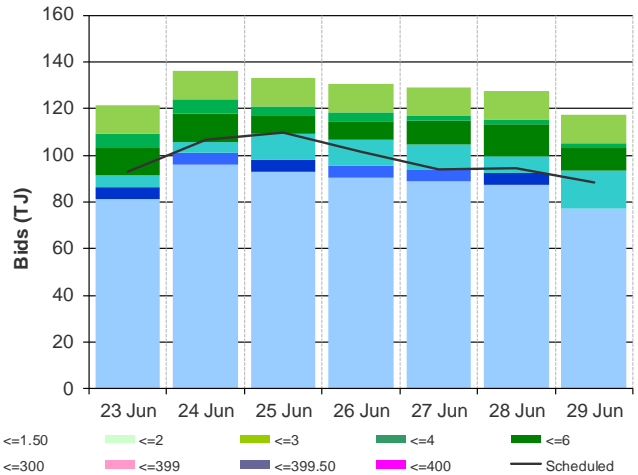


Figure 3.3: ADL STTM ex ante scheduled and allocated gas volumes by STTM facility

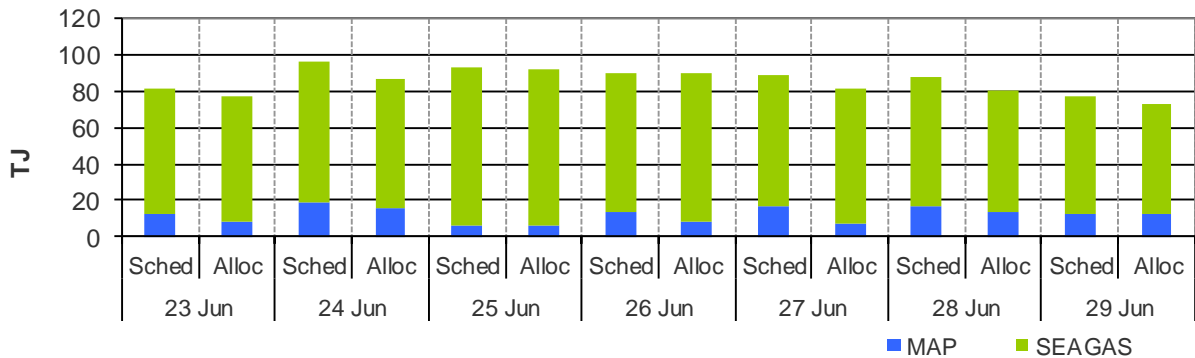


Figure 3.4 (a) ADL STTM MOS allocations (TJ)

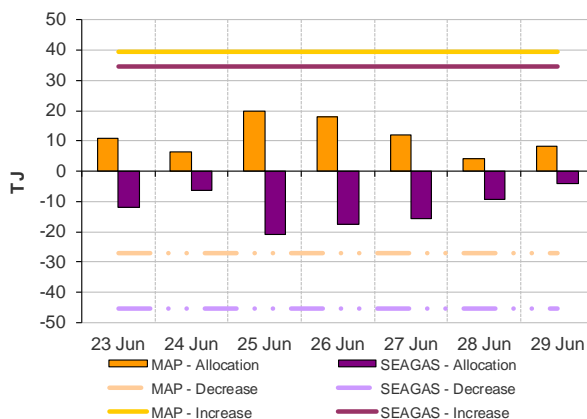
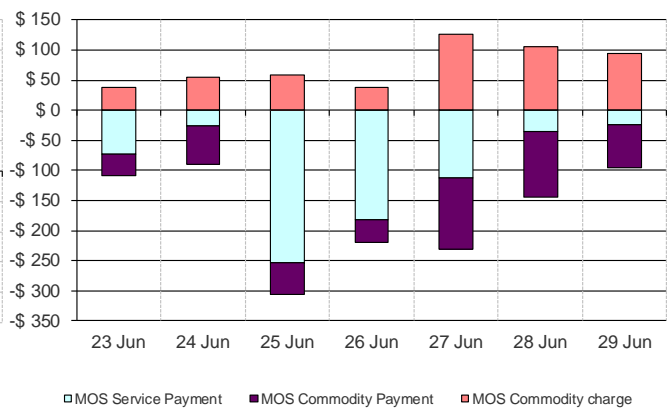


Figure 3.4 (b): Service payments and commodity payments/charges (\$000)



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

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Ex ante price (\$/GJ)	8.01	7.85	7.53	7.14	7.17	6.95	6.82
Ex ante quantity (TJ)	110	127	166	171	170	162	138
Ex post price (\$/GJ)	7.90	7.60	7.91	6.40	7.17	5.11	6.98
Ex Post quantity (TJ)	109	126	169	168	168	160	140

Figure 4.2 (a) Daily hub offers in price bands (\$/GJ)

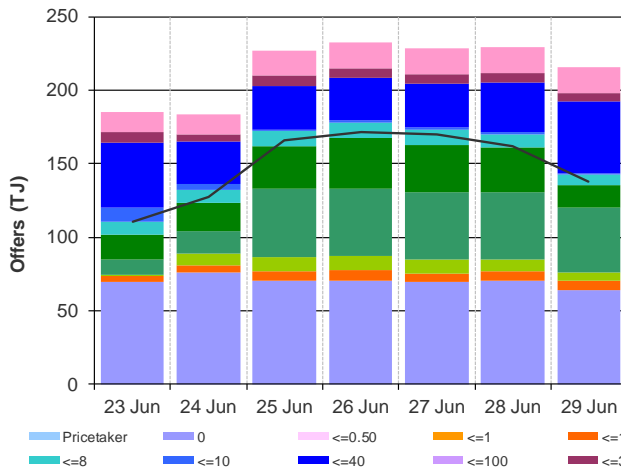


Figure 4.2(b): Daily hub bids in price bands (\$/GJ)

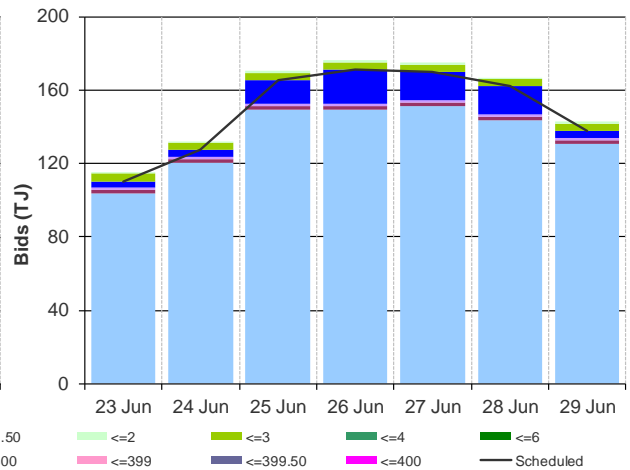


Figure 4.3: BRI STTM ex ante scheduled and allocated gas volumes by STTM facility

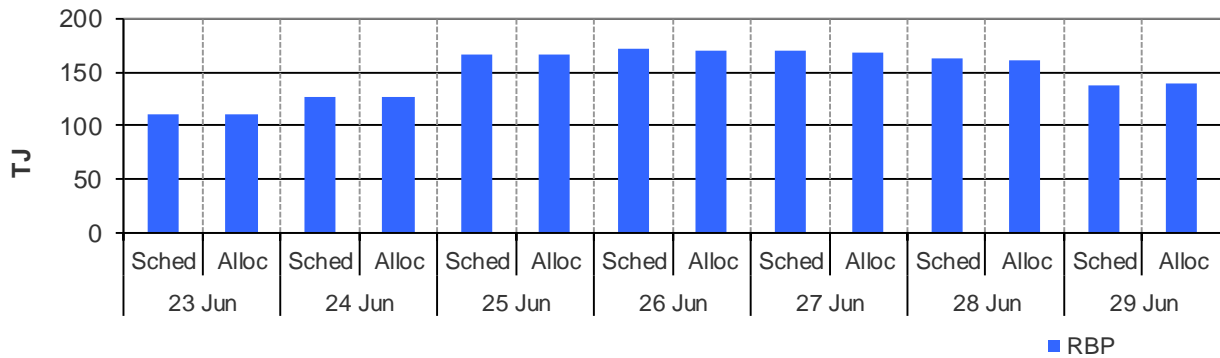


Figure 4.4 (a) BRI STTM MOS allocations (TJ)

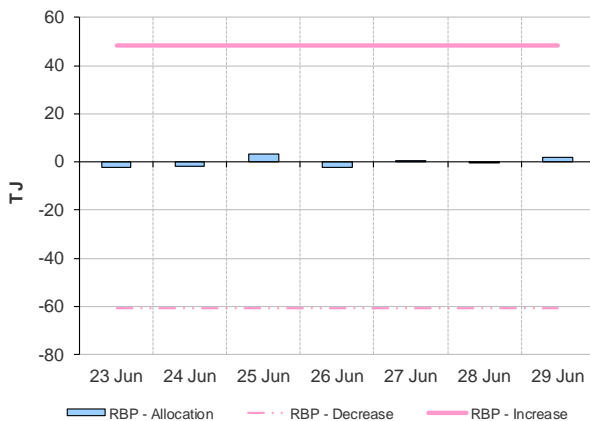
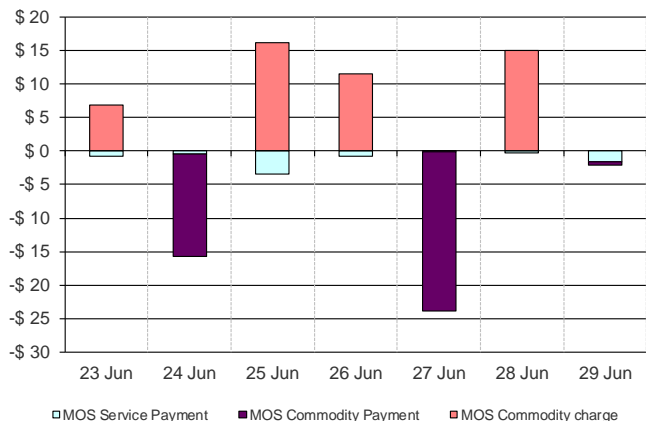


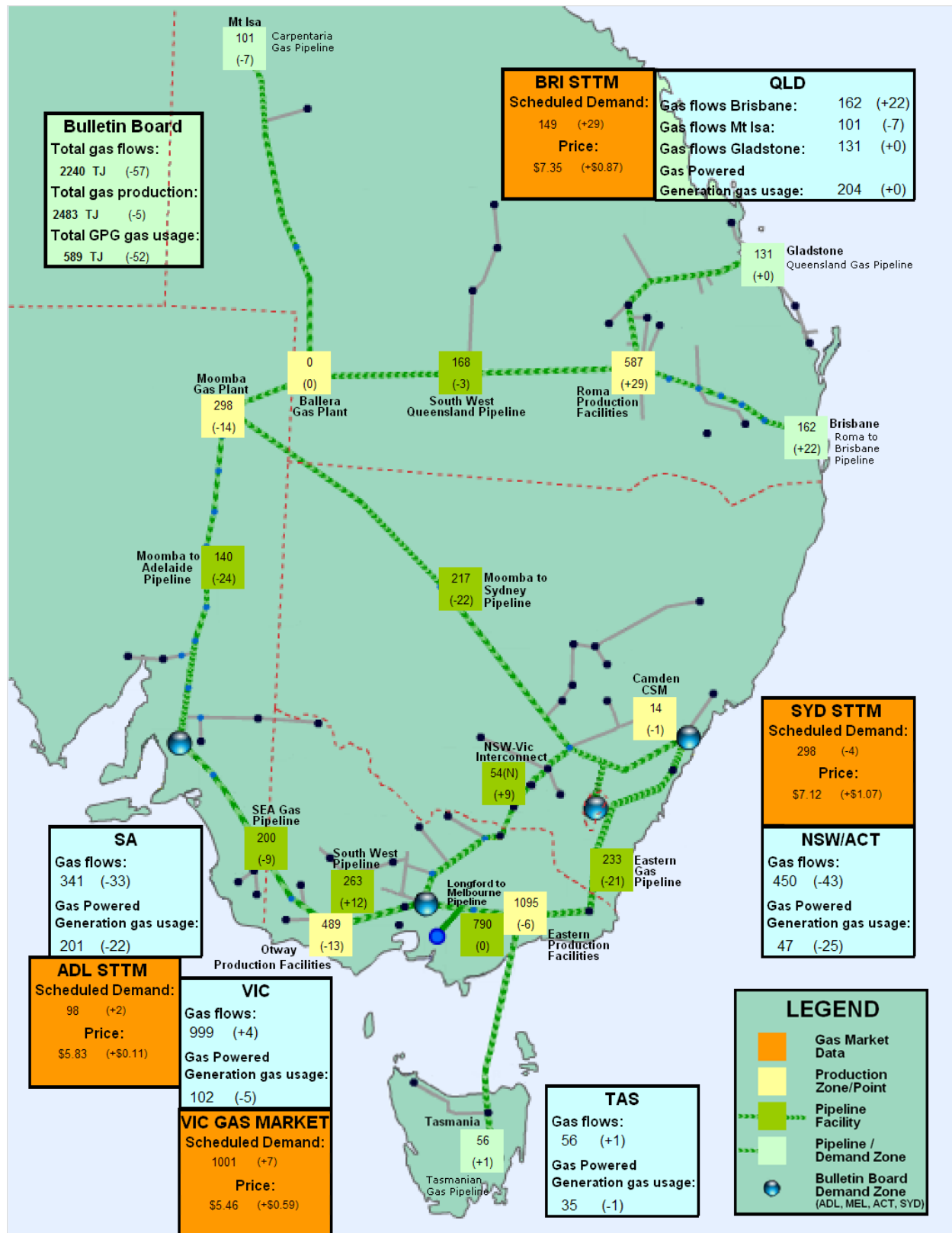
Figure 4.4 (b): Service payments and commodity payments/charges (\$000)



5 National Gas Bulletin Board

Figure 5.1 shows average daily actual flows for the current week in the aqua boxes⁸ 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.

Figure 5.1: Gas market data (\$/GJ, TJ); Production, Consumption and Pipeline flows (TJ)



⁸ 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 GPG volumes include gas usage that may not show up on Bulletin Board pipeline flows.