

Weekly Gas Market Report



AUSTRALIAN ENERGY
REGULATOR

3 February – 9 February 2013

Weekly summary

Brisbane daily average price for the week was significantly lower than the recent high prices and around 40 per cent lower than the previous week's average price.

There was also significant 'counteracting MOS' in Adelaide on Friday and Saturday with large volumes of increase MOS on MAP at the same time as decrease MOS on SEAGas. On both days allocated MAP flows (before MOS) were close to zero. Counteracting MOS volumes on Friday resulted in the largest MOS service payment since 19 October 2012.

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
03 Feb - 09 Feb 2013	4.77	4.76	4.80	5.60
% change from previous week	-2	3	0	-40
12-13 financial YTD	4.51	5.26	5.16	5.65
% change from previous financial YTD	54	74	40	84

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)
03 Feb - 09 Feb 2013	4.77	-	331
% change from previous week	-2	-	-1
12-13 financial YTD	4.51	-	575
% change from previous financial YTD	54	-	0

* Note: only positive ancillary payments, reflecting system constraints will be shown here

¹ The weighted average daily imbalance price applies for Victoria.

More detailed analysis on the Victorian declared wholesale market is provided in Section 1.

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)
03 Feb - 09 Feb 2013	4.76	4.69	5.50	215	211
% change from previous week	3	3	-46	2	2
12-13 financial YTD	5.26	5.58	11.03	242	243
% change from previous financial YTD	74	104	-73	5	8

Figure 4: Adelaide STTM

	Ex ante price (\$/GJ)	Ex post price (\$/GJ)	MOS payments (\$000)	Ex ante quantity (TJ)	Ex post quantity (TJ)
03 Feb - 09 Feb 2013	4.80	4.78	3.80	50	49
% change from previous week	0	-1	-45	-2	-7
12-13 financial YTD	5.16	5.08	8.69	70	68
% change from previous financial YTD	40	40	-15	3	1

Figure 5: Brisbane STTM

	Ex ante price (\$/GJ)	Ex post price (\$/GJ)	MOS payments (\$000)	Ex ante quantity (TJ)	Ex post quantity (TJ)
03 Feb - 09 Feb 2013	5.60	7.13	2.51	149	150
% change from previous week	-40	-12	36	-6	-3
12-13 financial YTD	5.65	5.57	2.65	145	144

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.

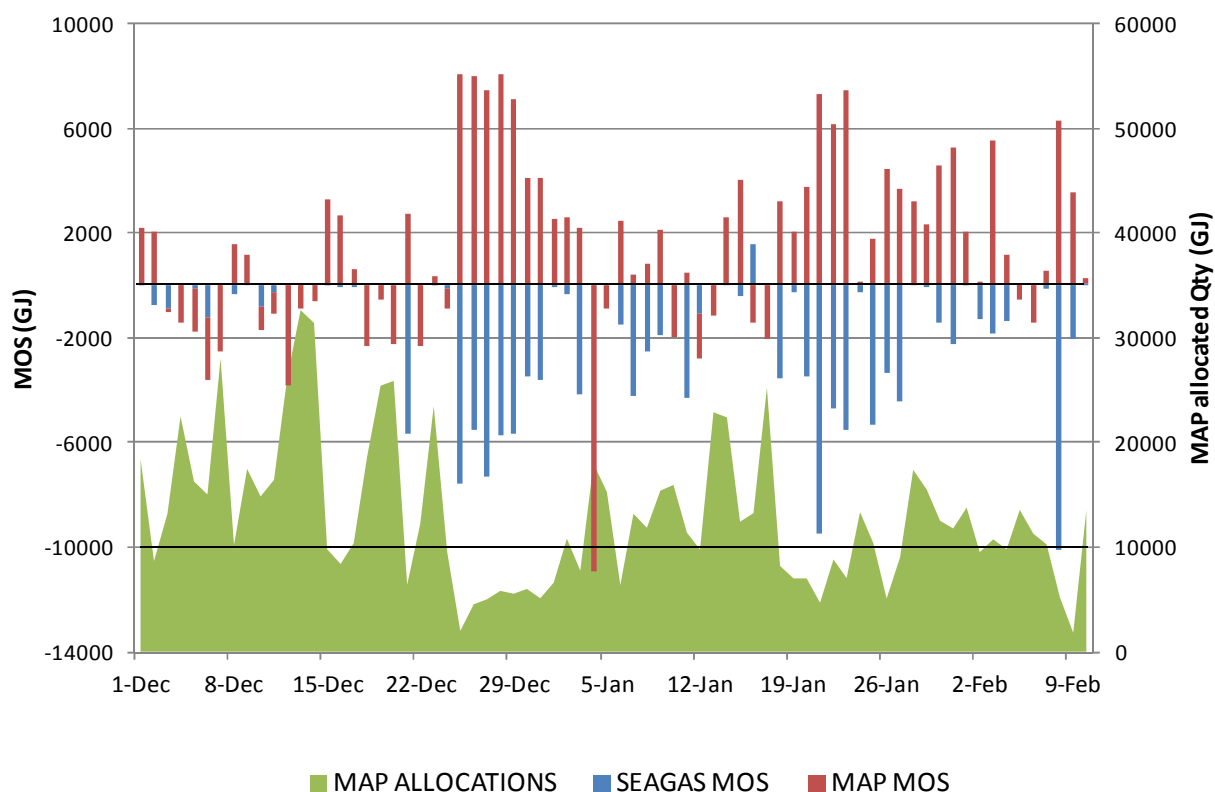
Significant Market Events or Issues this week

Counteracting MOS

Analysis shows that on days of low gas flows (less than 10 000 GJ) across the MAP pipeline, MOS volumes typically accrue across both the SEAGas and MAP pipelines. Specifically, there tends to be decrease MOS on the SEAGas pipeline and increase MOS on MAP. Furthermore, the increase and decrease MOS quantities are of similar order hence can be viewed as counteracting MOS. This outcome is less prevalent on days of high gas flows on MAP.

Figure 6 shows the daily MOS accrued on MAP and SEAGAS against the respective allocated quantities on MAP for the period of 1 Dec 2012 to 10 Feb 2013.

Figure 6: MOS on SEAGAS and MAP vs allocated quantities on MAP since 1 Dec 2012



Low flows on MAP most often resulted in counteracting MOS over the period. Days where this outcome did not occur (there was no counteracting MOS despite low MAP volumes) notably were days of large network deviations.² Figure 6 illustrates that counteracting MOS occurred almost every day for the periods between 25 December 2012 to 6 January 2013 and 18 to 27 January 2013 when MAP allocated gas was below 10,000 GJ. Conversely, when MAP flows were above 20,000 GJ there were no instances of counteracting MOS.

Administered Price in Victorian Gas Market—4 February

On 4 February 2013, AEMO moved market systems and processes to a disaster recovery site following a power outage at its main site. As a result of issues associated with this move; AEMO administered the price for the 10 AM scheduling horizon. This was because it was unable to run 10 AM market schedules in time and, as a result, the 10 AM price was set at the previous 6 AM price. Had schedules been able to be run in time for 10 AM, the price would have been approximately 10 cents higher. AEMO has undertaken to issue a full investigative report by 22 February 2013 on the cause of the administered price which will also report on communication issues in sending out market notices on the gas day.

² For example on 4 January 2013, when MAP allocations were around 18 TJ, there was a significant network deviation. This deviation was a due to an unplanned outage of a large industrial load, which resulted in an over forecast of 11 TJ and 10 TJ of decrease MOS on MAP.

Detailed Market Analysis

3 February – 9 February 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

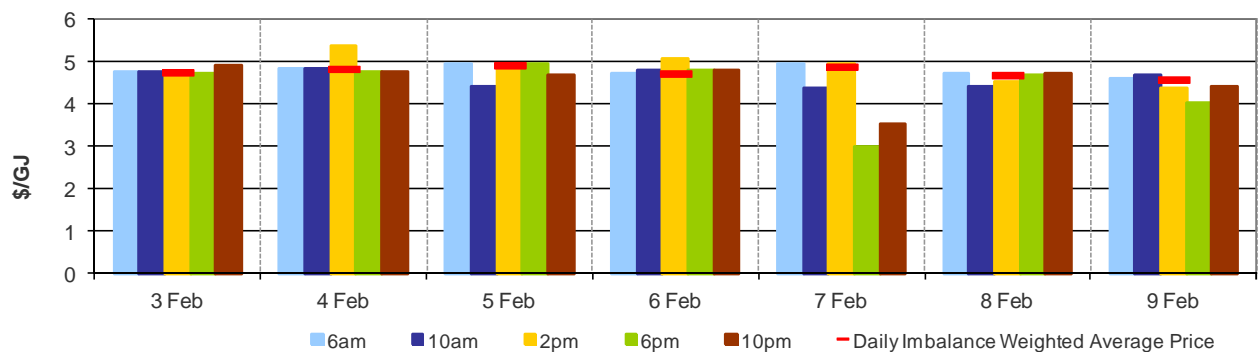
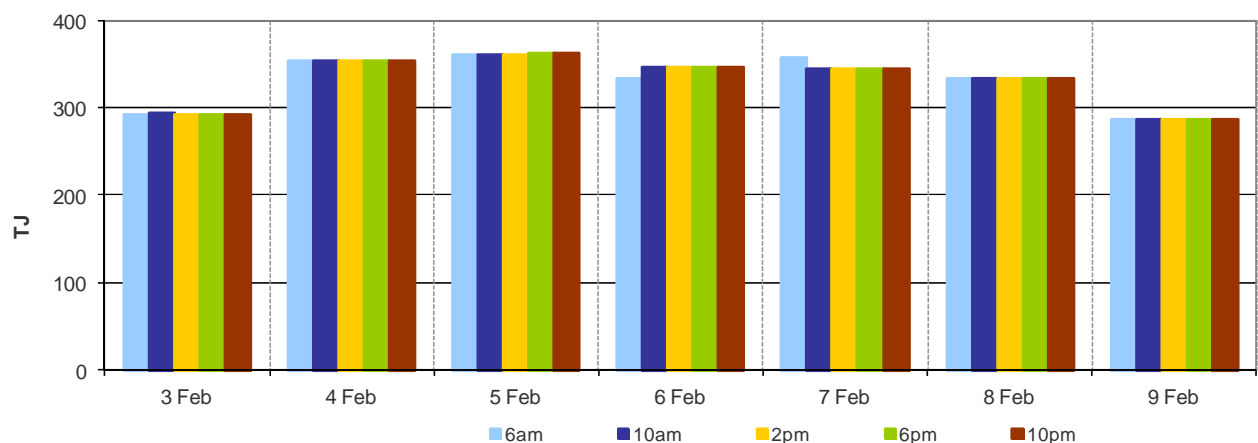


Figure 1.2: Demand forecasts



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

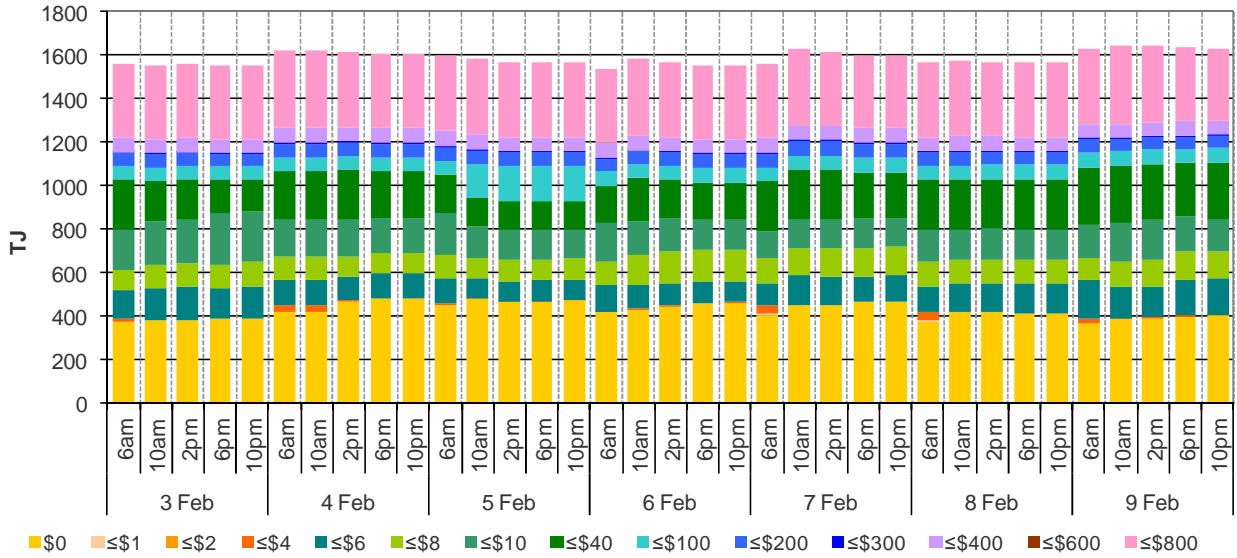


Figure 1.4: Withdrawal bids by price bands

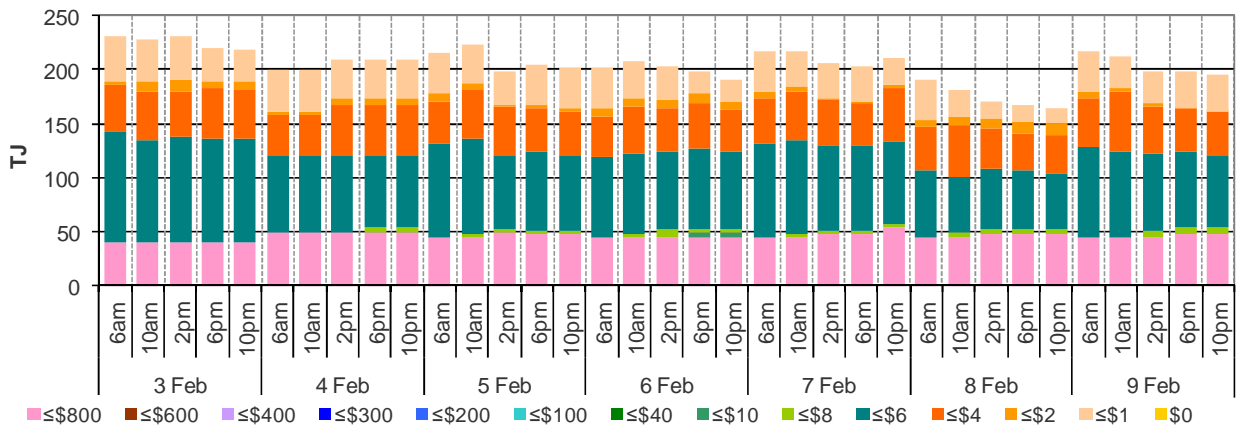
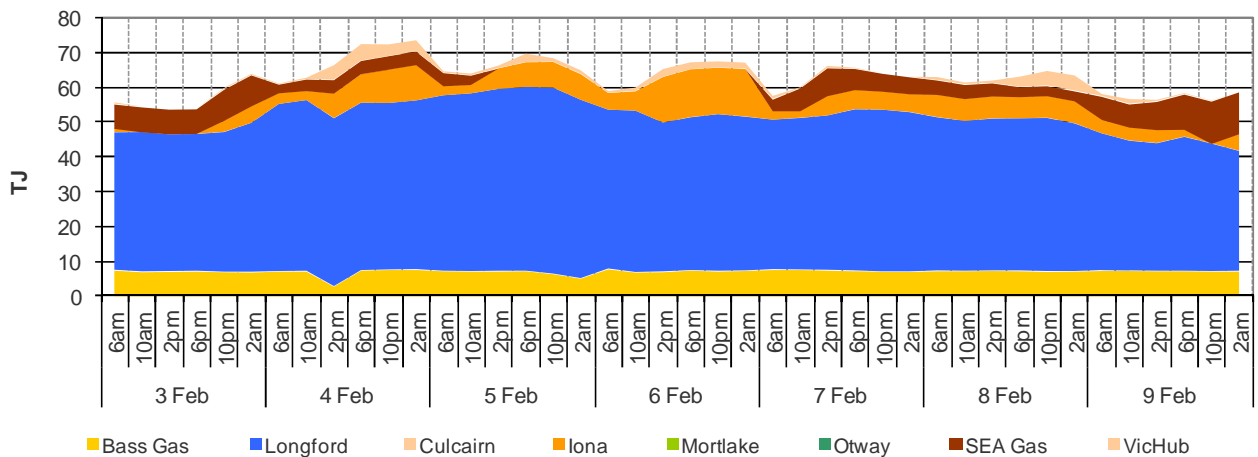


Figure 1.5: Metered Injections by System Injection Point



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)	4.95	4.95	4.85	4.40	4.95	4.83	4.41
Ex ante quantity (TJ)	196	228	220	225	225	216	194
Ex post price (\$/GJ)	4.95	4.90	4.85	4.40	4.89	4.40	4.41
Ex Post quantity (TJ)	198	224	219	223	216	206	191

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

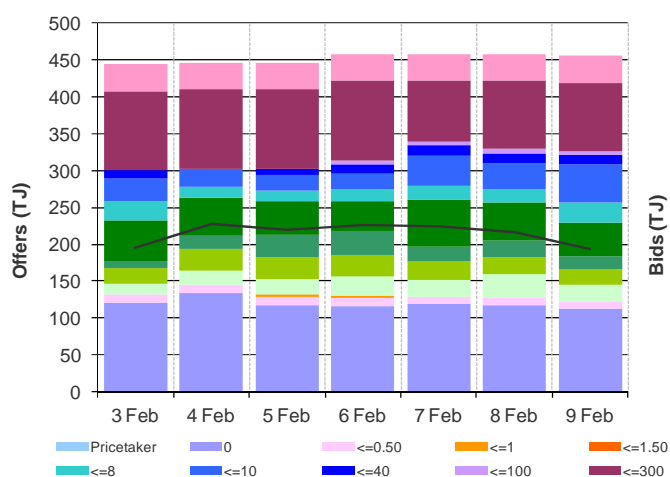
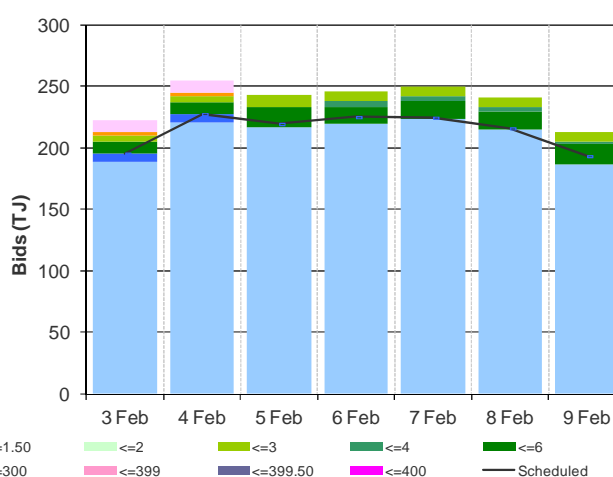


Figure 2.2(b): Daily hub bids in price bands (\$/GJ)



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

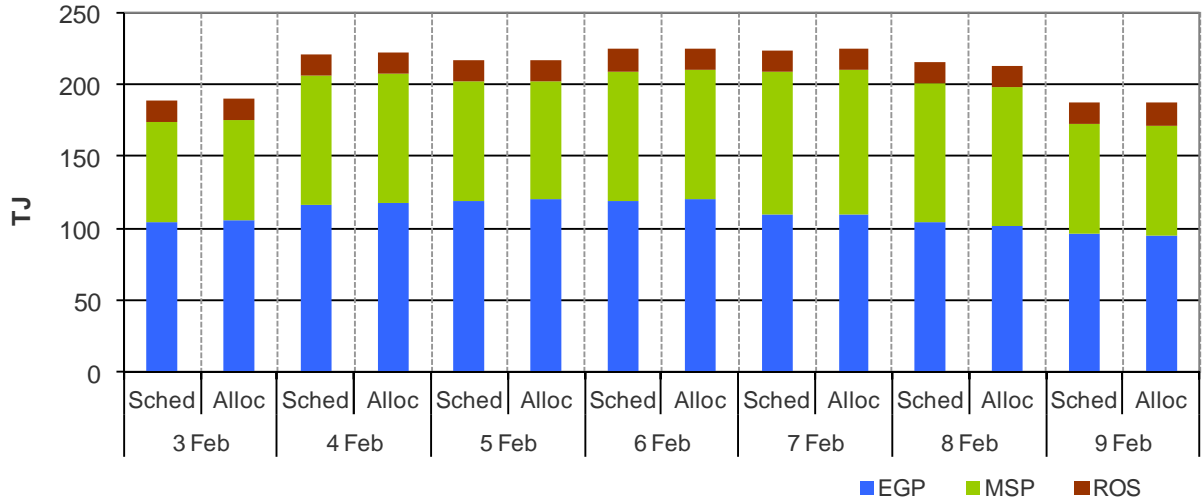


Figure 2.4 (a) SYD STTM MOS allocations (TJ)

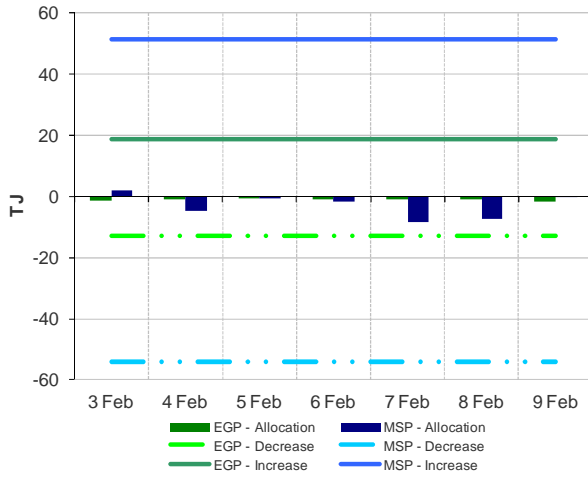
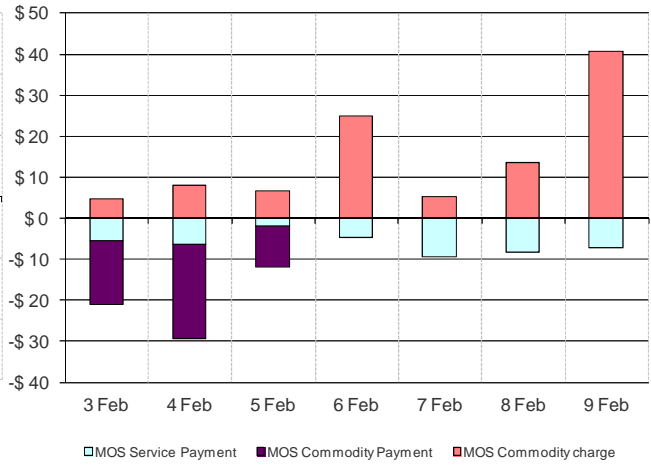


Figure 2.4 (b): Service payments and commodity payments/charges (\$000)



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)	4.79	4.80	4.80	4.80	4.79	4.79	4.80
Ex ante quantity (TJ)	41	54	55	55	55	54	38
Ex post price (\$/GJ)	5.25	4.80	4.80	4.80	4.80	4.24	4.79
Ex Post quantity (TJ)	46	55	55	53	55	46	36

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

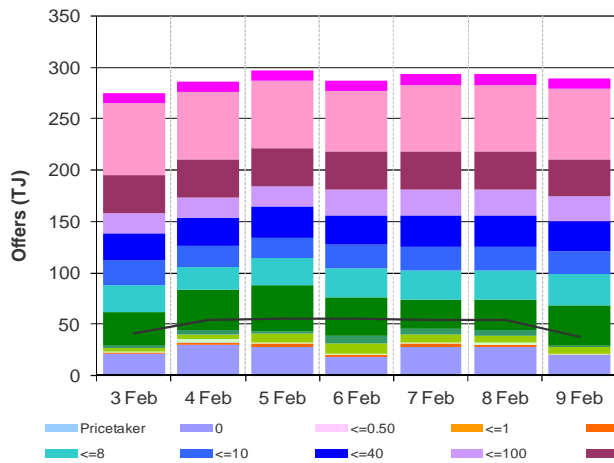


Figure 3.2(b): Daily hub bids in price bands (\$/GJ)

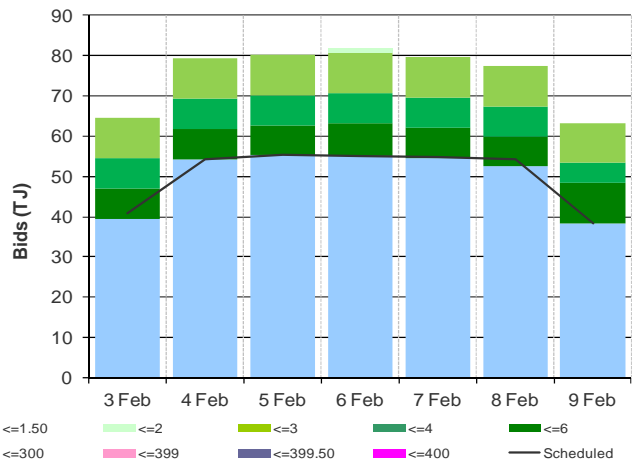


Figure 3.3: ADL STTM ex ante scheduled and allocated gas volumes by STTM facility

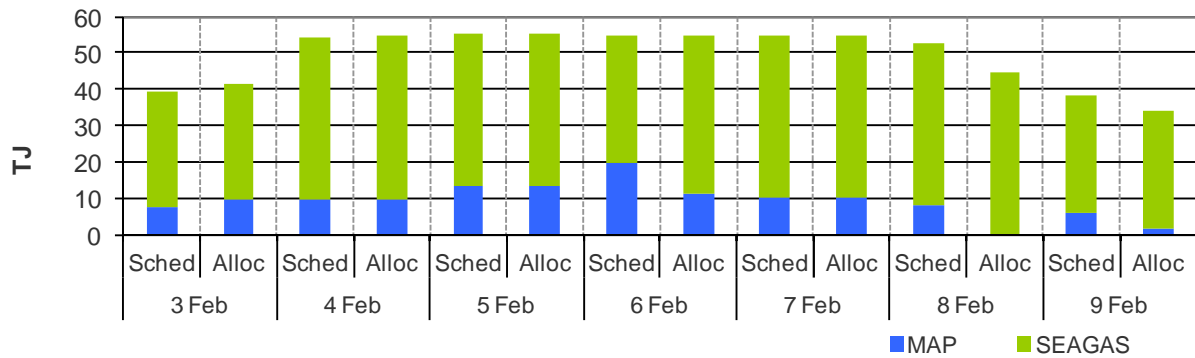


Figure 3.4 (a) ADL STTM MOS allocations (TJ)

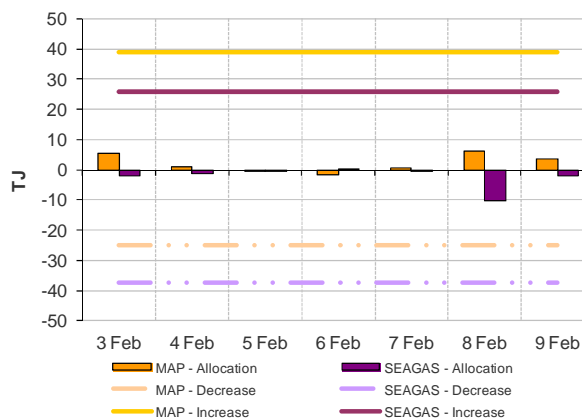
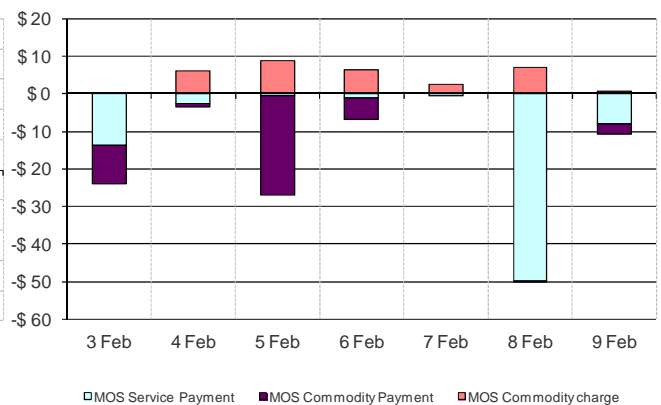


Figure 3.4 (b): Service payments and commodity payments/charges (\$000)



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)	5.70	5.70	5.69	5.67	5.71	5.35	5.35
Ex ante quantity (TJ)	139	151	154	155	156	150	134
Ex post price (\$/GJ)	5.70	9.74	9.40	5.50	5.50	5.02	9.05
Ex Post quantity (TJ)	138	157	159	154	154	148	140

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

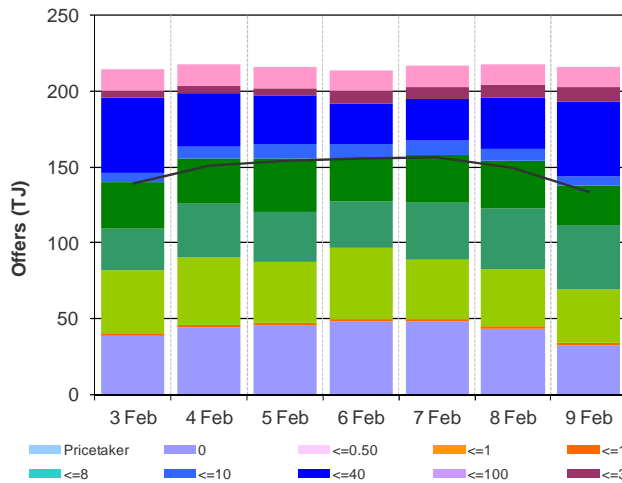


Figure 4.2(b): Daily hub bids in price bands (\$/GJ)

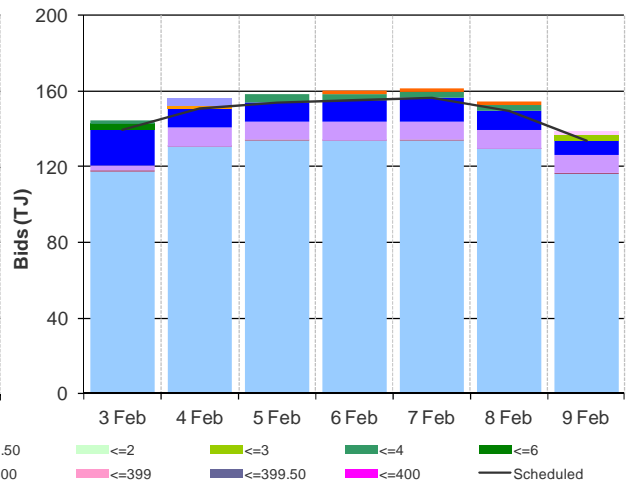


Figure 4.3: BRI STTM ex ante scheduled and allocated gas volumes by STTM facility

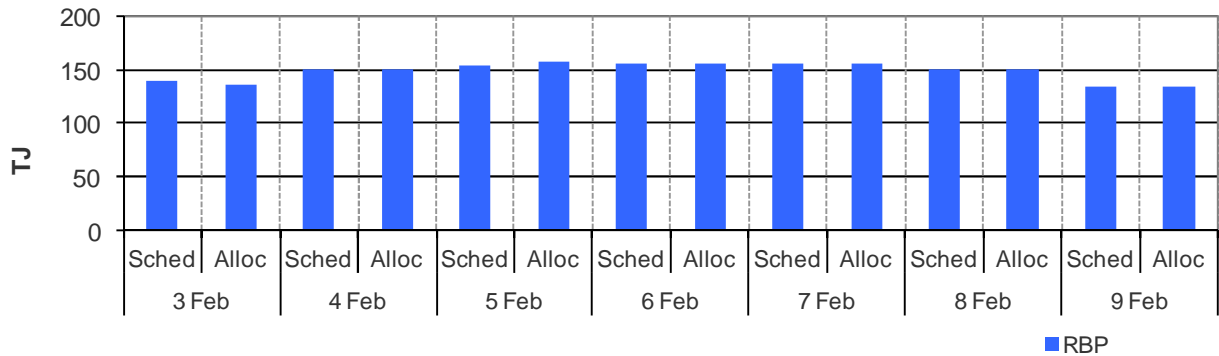


Figure 4.4 (a) BRI STTM MOS allocations (TJ)

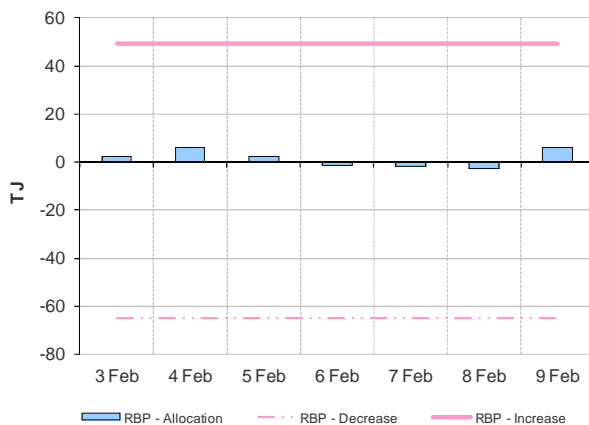
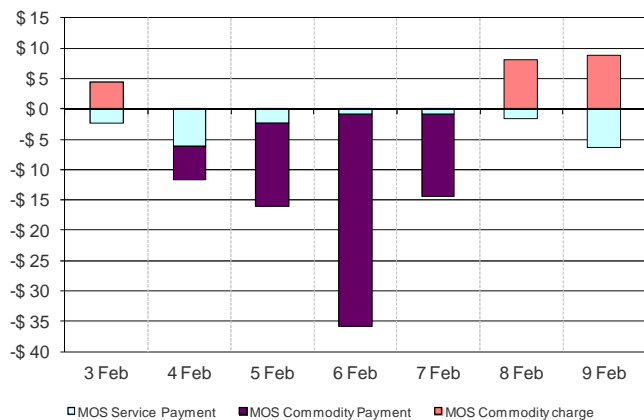


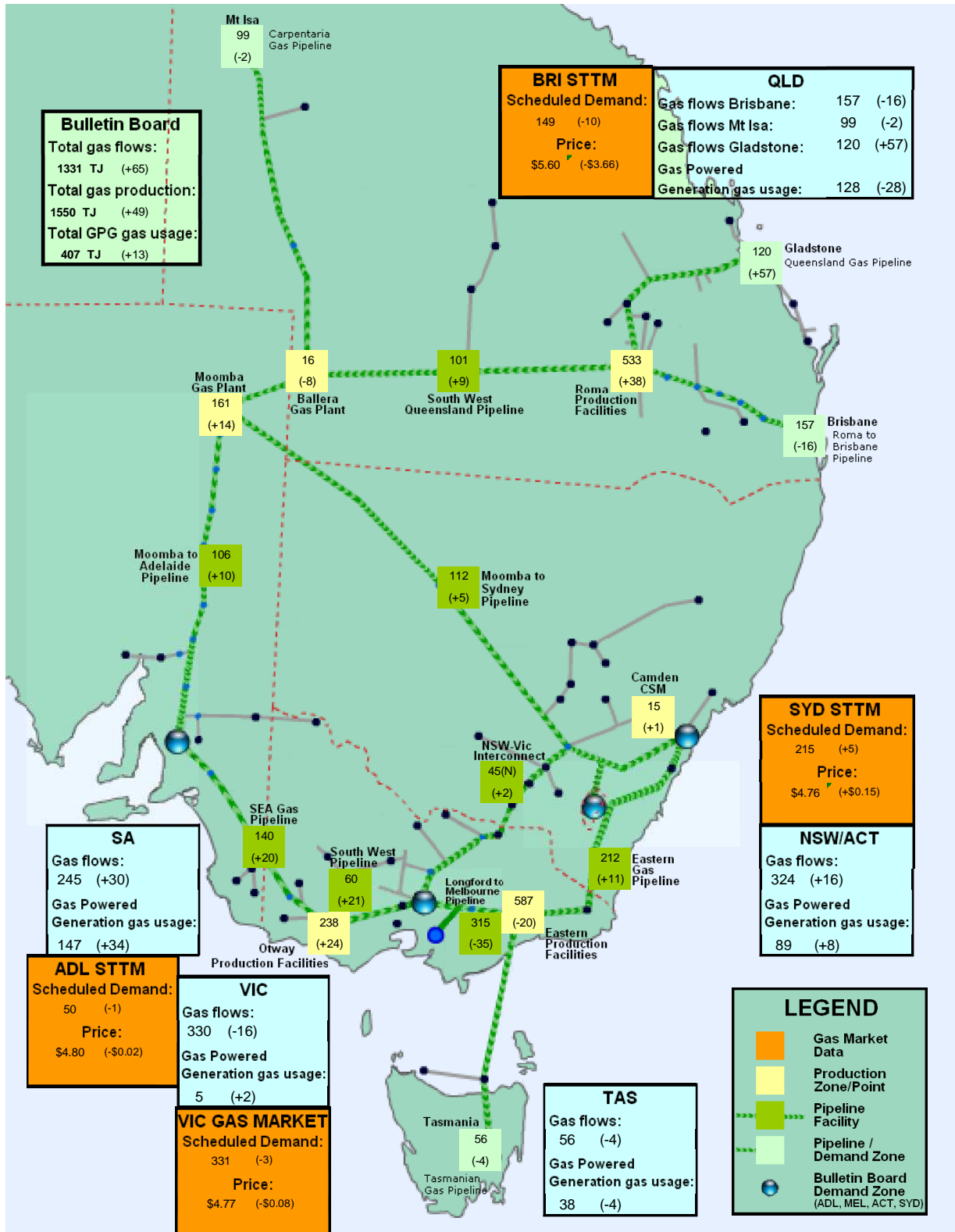
Figure 4.4 (b): Service payments and commodity payments/charges (\$000)



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. QLD GPG figure does not currently include Darling Downs and Condamine.