Weekly Gas Market Report

AUSTRALIAN ENERGY REGULATOR

2-8 September 2012

Weekly summary

Prices in the Victorian, Adelaide, and Brisbane markets decreased slightly compared to the previous week, with each market's price reducing by between 2 and 5 per cent.

The biggest reduction was seen in the Sydney market, which saw a 12 per cent reduction in price.

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
02 Sep - 08 Sep 2012	4.47	5.79	5.86	5.36
% change from previous week	-5	-12	-2	-3
12-13 financial YTD	5.25	6.66	6.33	5.56
% change from previous financial YTD	52	89	63	-

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)
02 Sep - 08 Sep 2012	4.47	-	658
% change from previous week	-5	-	-21
12-13 financial YTD	5.25	-	891
% change from previous financial YTD	52	-	4

*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.

[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)
02 Sep - 08 Sep 2012	5.79	6.10	4.34	250	252
% change from previous week	-12	-18	-52	-8	-10
12-13 financial YTD	6.66	7.64	13.12	292	296
% change from previous financial YTD	89	153	-76	3	8

Figure 4: Adelaide STTM

	Ex ante price ($/GJ)	Ex post price ($/GJ)	MOS payments ($000)	Ex ante quantity (TJ)	Ex post quantity (TJ)
02 Sep - 08 Sep 2012	5.86	5.56	7.73	85	80
% change from previous week	-2	-7	251	-7	-12
12-13 financial YTD	6.33	6.39	7.58	93	91
% change from previous financial YTD	63	63	-16	9	7

Figure 5: Brisbane STTM

	Ex ante price ($/GJ)	Ex post price ($/GJ)	MOS payments ($000)	Ex ante quantity (TJ)	Ex post quantity (TJ)
02 Sep - 08 Sep 2012	5.36	4.74	1.99	118	116
% change from previous week	-3	-13	-51	-1	-1
From market start (1 Dec)	5.56	5.34	3.62	145	143

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.

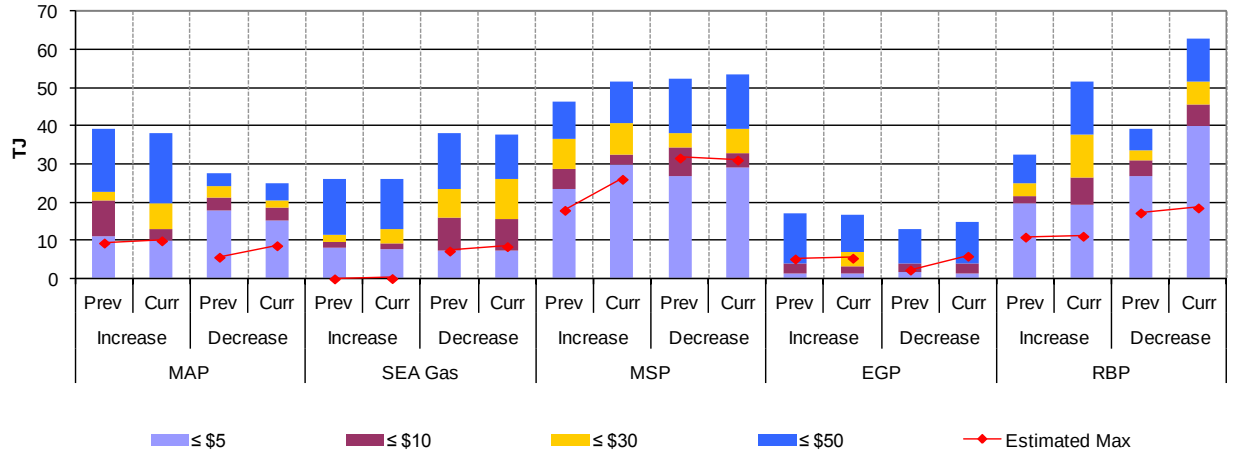
Significant Market Events or Issues this week

As noted in the explanatory guide 3, Market Operator Service or MOS is a daily mechanism for allocating balancing gas provided by pipelines to maintain pressures at receipt points. Increase MOS and Decrease MOS are services backed by contractual rights that trading participants have with pipelines to either loan or park gas. These services are typically required when demand in a hub differs from forecast, causing imbalances on connected pipelines. This week, AEMO published aggregated STTM trading participant MOS offers for the next period (September – November).

Figure 6 shows total offered volumes within price bands for each of the MOS services on each pipeline. Current period volumes by price bands are compared side by side to the previous MOS period (June to August). The red line in the figure shows the AEMO estimate of maximum daily quantity of Market Operator Service (MOS) for each service on each pipeline for the period.

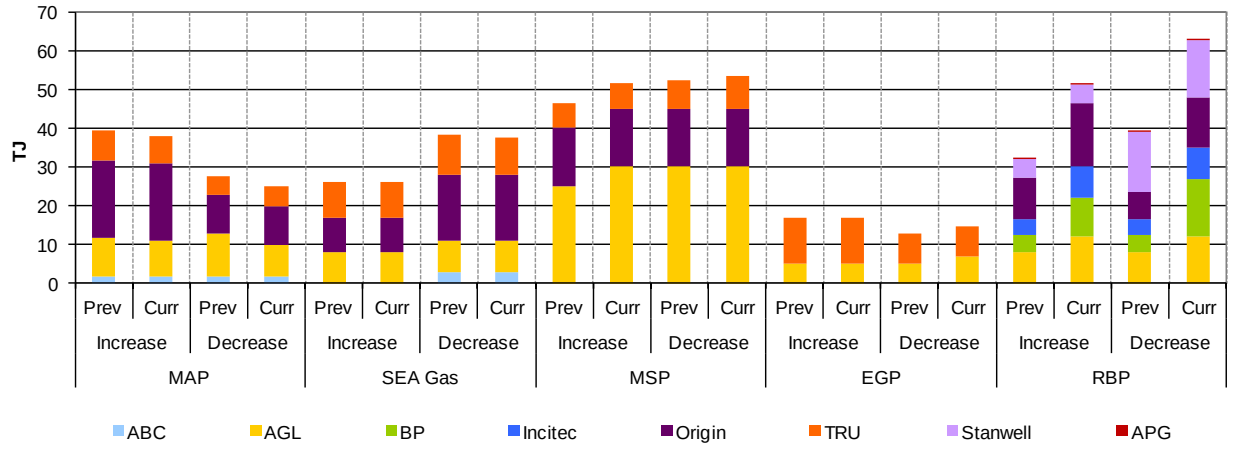
Where total MOS offers exceed the AEMO estimated maximum requirements, this provides some surety that sufficient daily balancing gas services exist. Figure 7 shows the total volumes offered by each trading participant for each MOS service at any price. Trading participants' offers for the current period are compared side by side to the previous period.

Figure 6: MOS offers and MOS estimate – current and previous MOS period comparison*



* (Curr) Current MOS period refers to the period September to November 2012, (Prev) Previous MOS period refers to the preceding period from June to August 2012.

Figure 7: Proportion of MOS offers by Participant



The Moomba to Sydney Pipeline, which is a pressure-controlled pipeline, has consistently supplied larger MOS volumes to the Sydney hub than the EGP, a flow-controlled pipeline. However, given the continued higher cost of EGP MOS offers for the next period, high levels of MOS service payments may still be expected for relatively low volumes of MOS delivered on the EGP.

With the exception of the Roma to Brisbane Pipeline (RBP), the new offers of increase and decrease MOS did not vary significantly from the previous period. The RBP recorded a rise in increase MOS offers from the previous period and also a higher amount of decrease MOS offers than any other pipeline.

On the RBP, compared to other pipelines, more of the offers were at or below $5 per TJ. This may be related to the greater number of participants operating in the Brisbane hub and competition between participants keeping offer prices lower.

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 forecasts[2], and injection/withdrawal bids[3]. 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: Prices by schedule

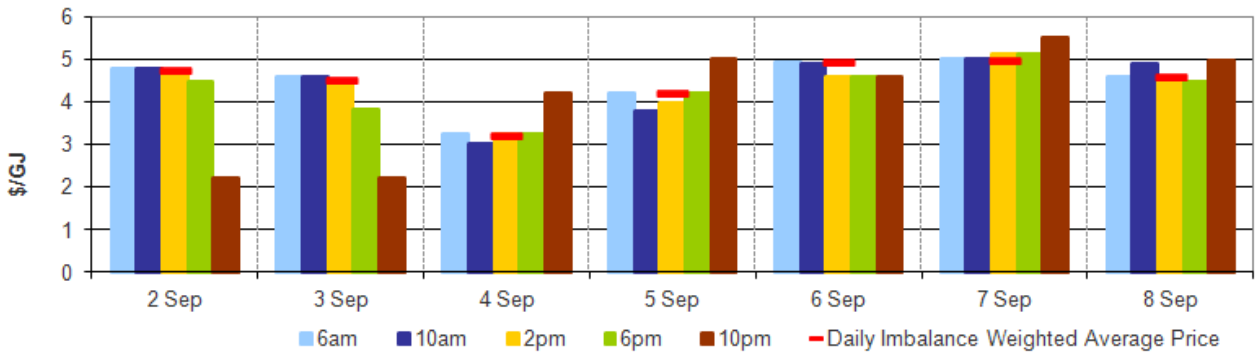
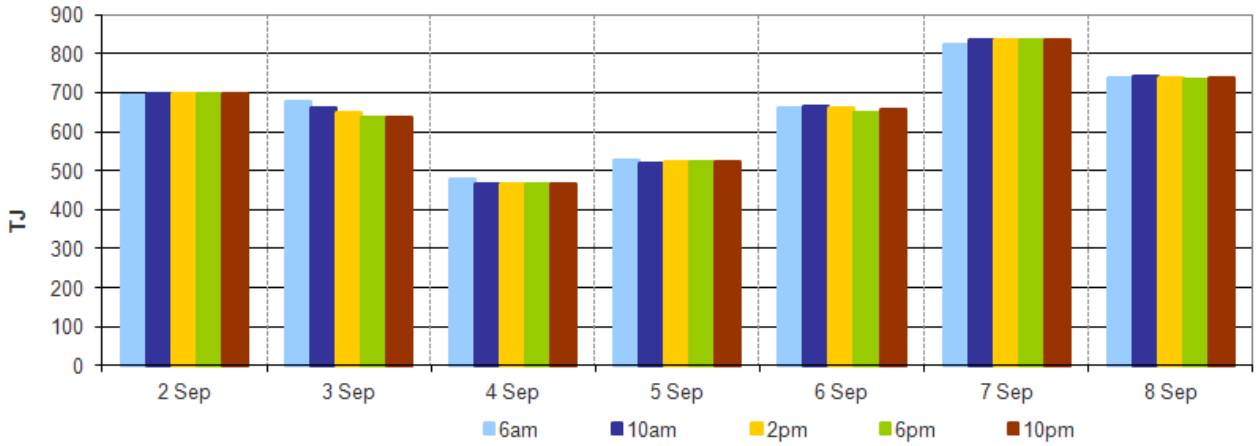


Figure 1.3: Demand forecasts



[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.

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Figure 1.4: Injection bids by price bands

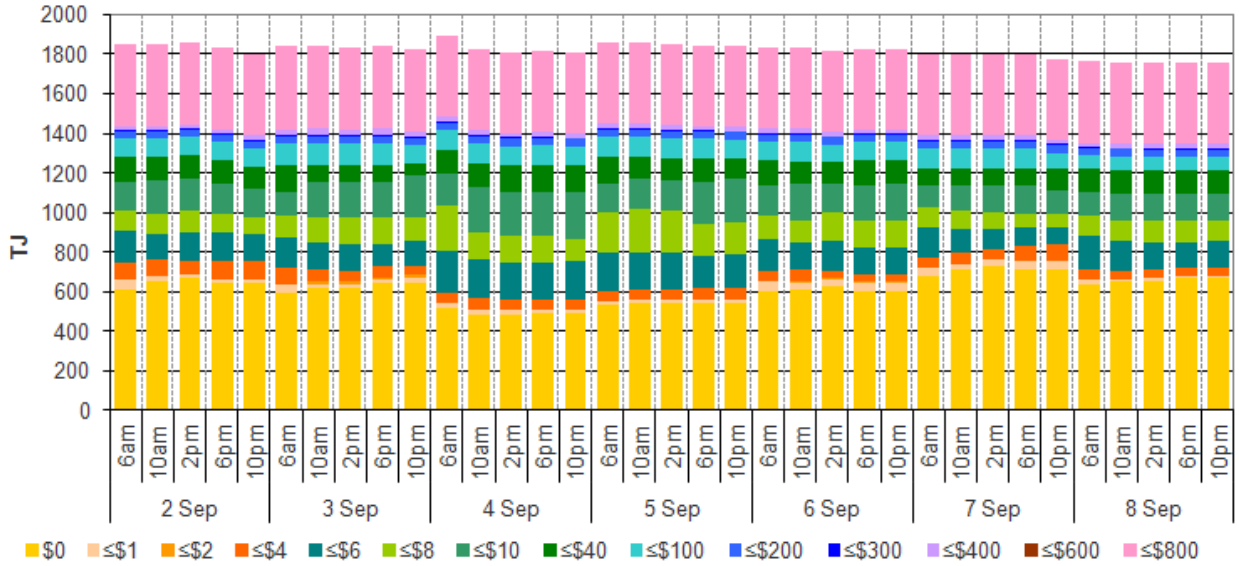


Figure 1.5: Withdrawal bids by price bands

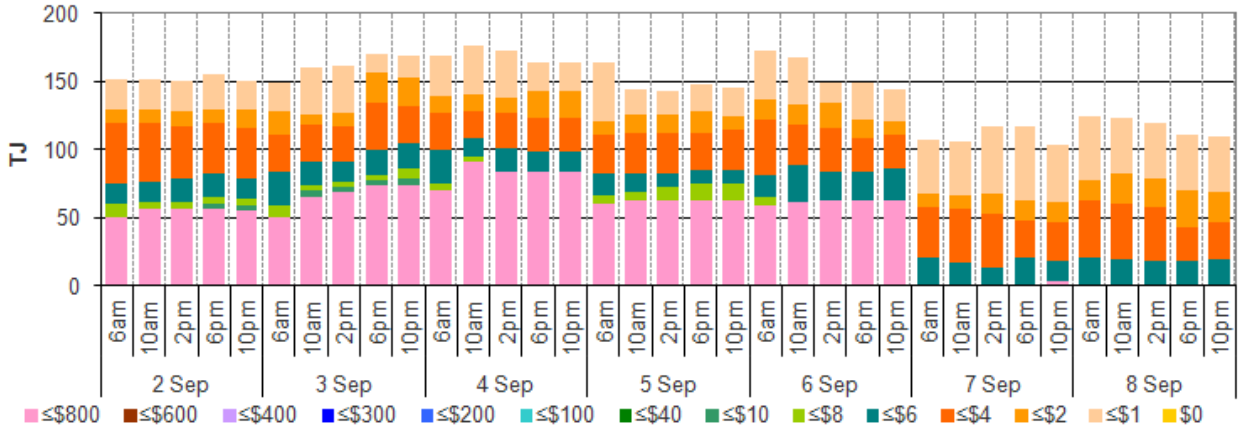
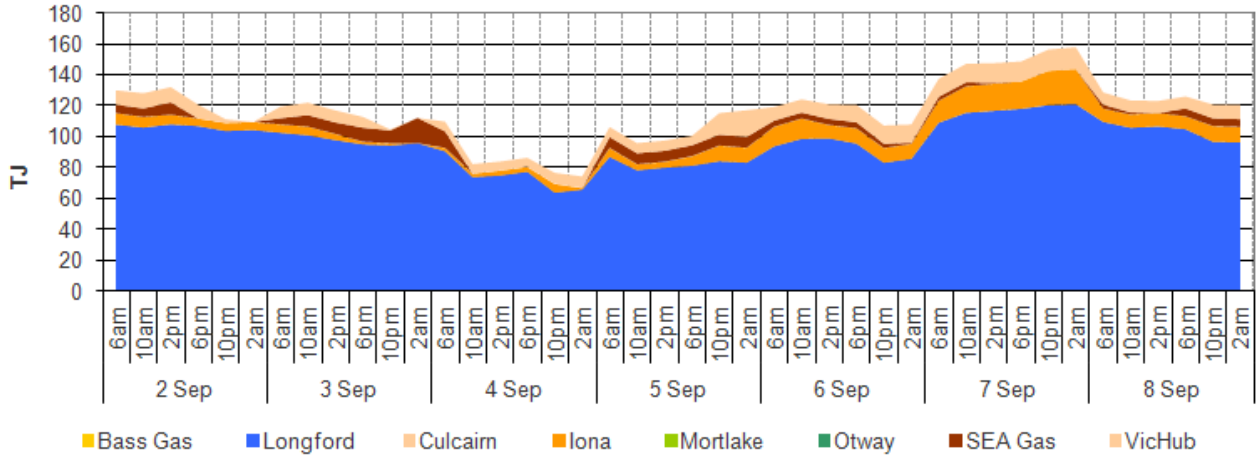


Figure 1.6: Metered Injections by System Injection Point



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.

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

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Ex ante price ($/GJ)	6.01	6.01	6.01	5.51	5.90	5.41	5.68
Ex ante quantity (TJ)	243	277	264	252	243	242	227
Ex post price ($/GJ)	7.98	6.01	6.02	5.51	5.98	5.78	5.41
Ex Post quantity (TJ)	248	279	271	247	244	253	226

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

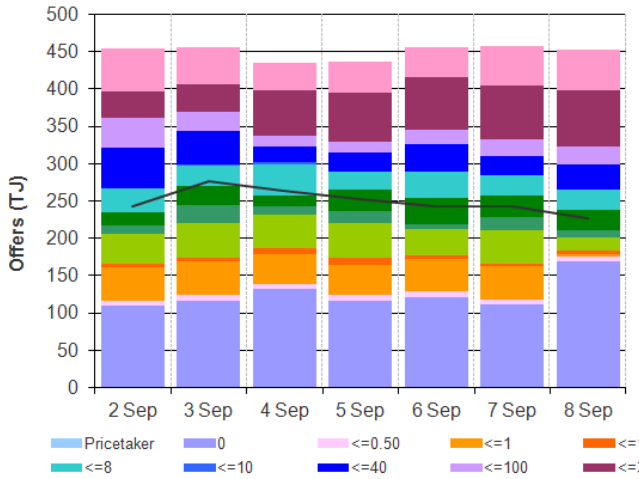
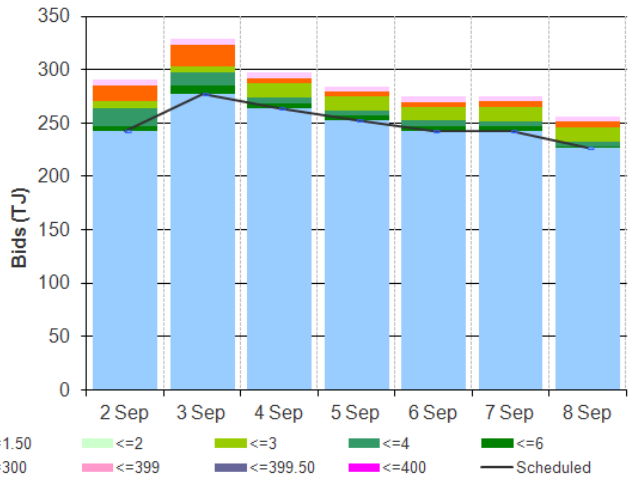


Figure 2.2(b): Daily hub bids in price bands ($/GJ)



[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 2.2: SYD STTM ex ante scheduled and allocated gas volumes by STTM facility

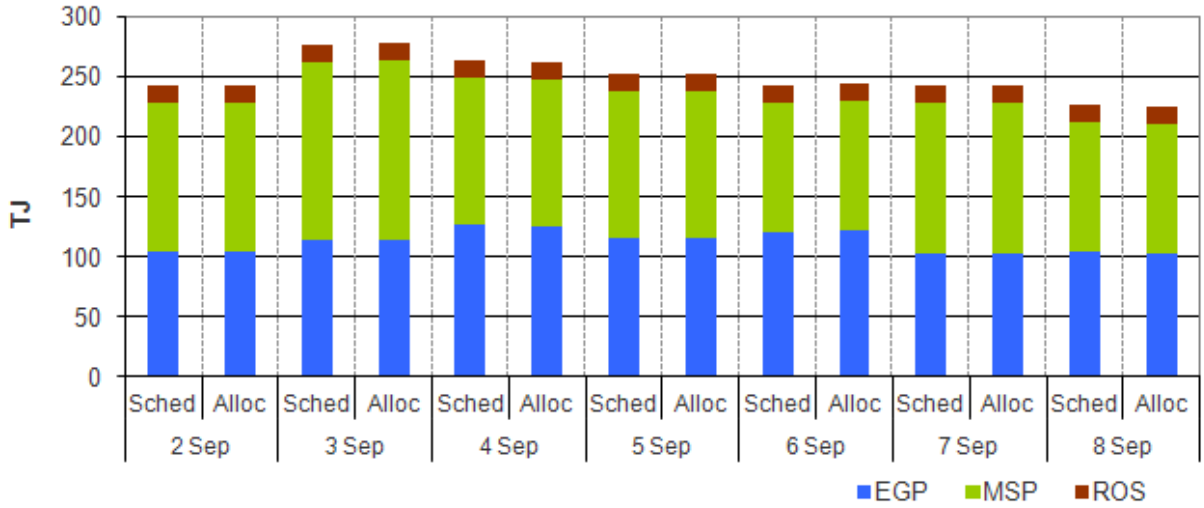


Figure 2.4 (a) SYD STTM MOS allocations (TJ)

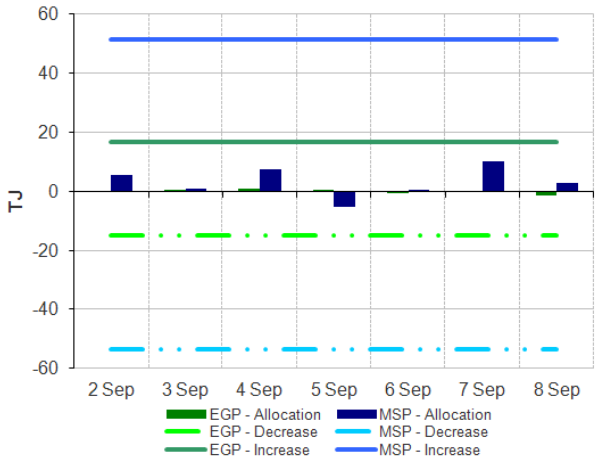
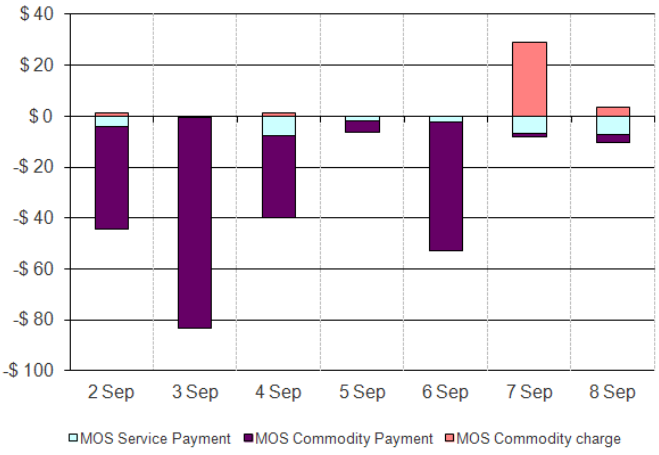


Figure 2.4 (b): Service payments and commodity payments/charges ($000)



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 ($/GJ)	5.94	5.88	5.87	5.88	5.85	5.82	5.81
Ex ante quantity (TJ)	81	88	81	88	90	89	74
Ex post price ($/GJ)	5.18	5.85	5.18	5.20	5.85	5.84	5.81
Ex Post quantity (TJ)	70	79	71	82	92	92	73

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

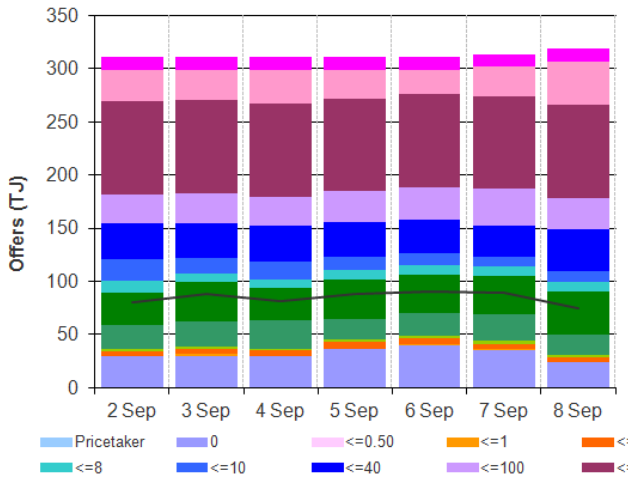


Figure 3.2(b): Daily hub bids in price bands ($/GJ)

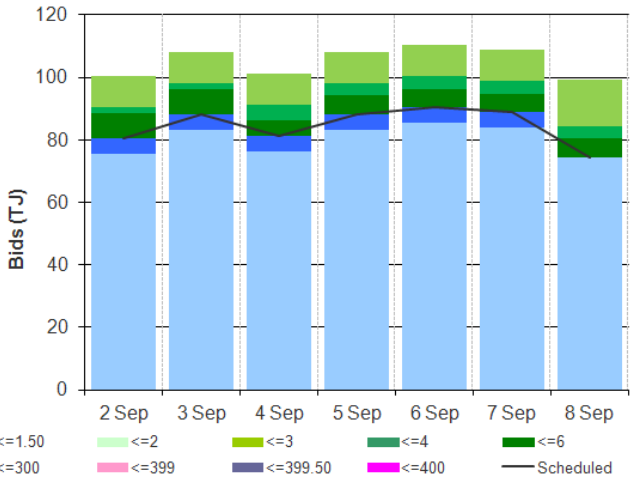


Figure 3.3: ADL STTM ex ante scheduled and allocated gas volumes by STTM facility

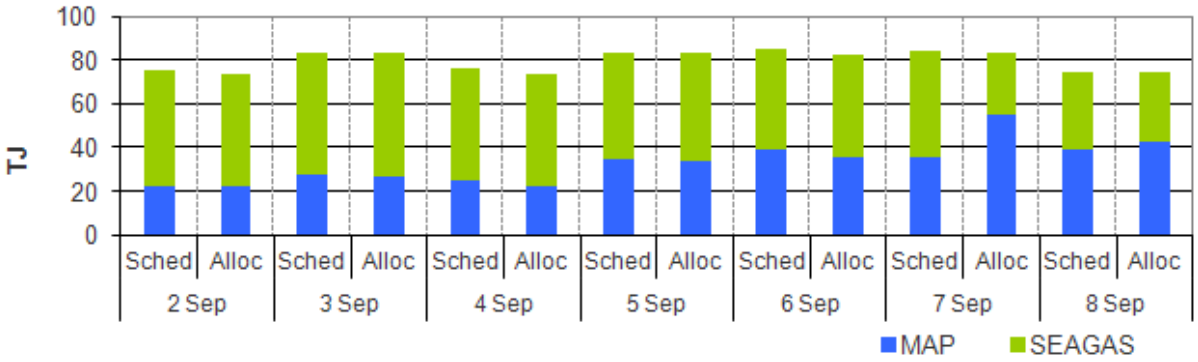


Figure 3.4 (a) ADL STTM MOS allocations (TJ)

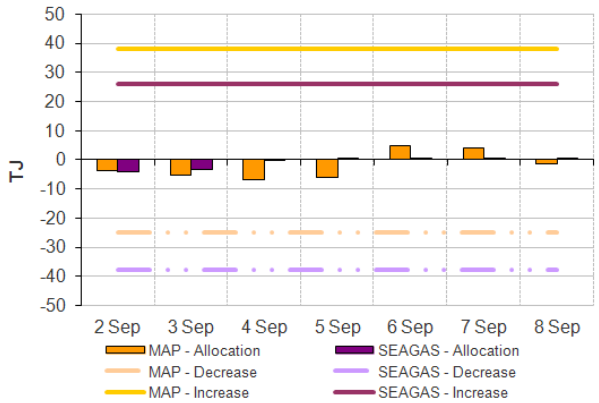
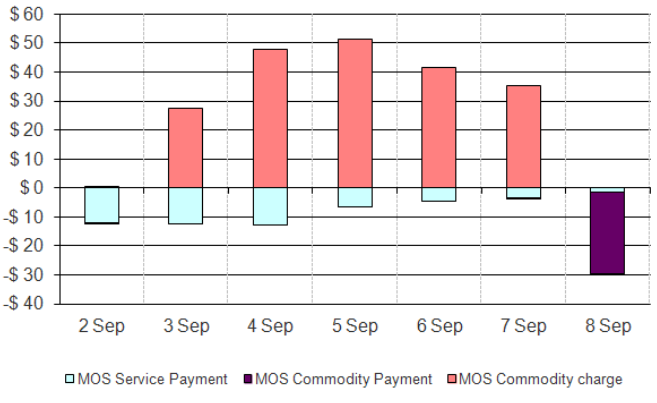


Figure 3.4 (b): Service payments and commodity payments/charges ($000)



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 ($/GJ)	4.63	4.65	7.09	7.03	4.65	4.66	4.79
Ex ante quantity (TJ)	109	126	125	125	122	114	102
Ex post price ($/GJ)	4.63	4.65	5.00	5.00	4.65	4.63	4.63
Ex Post quantity (TJ)	109	124	121	121	121	111	101

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

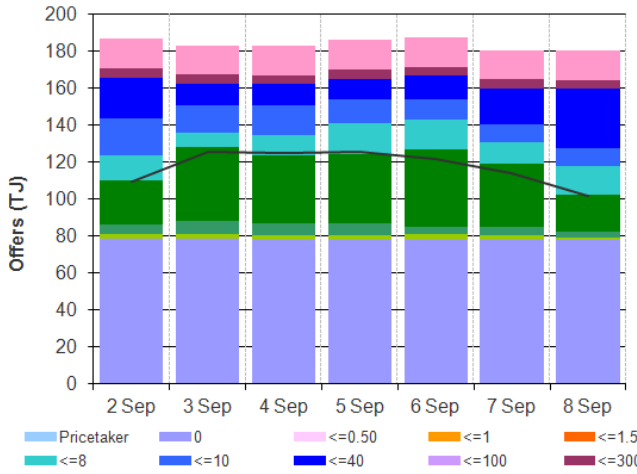


Figure 4.2(b): Daily hub bids in price bands ($/GJ)

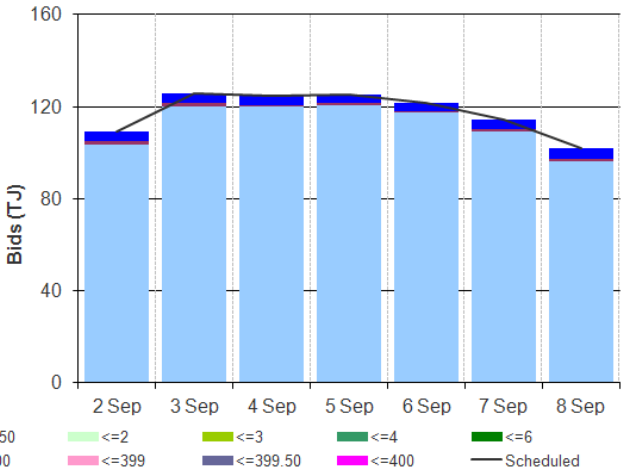


Figure 4.3: BRI STTM ex ante scheduled and allocated gas volumes by STTM facility

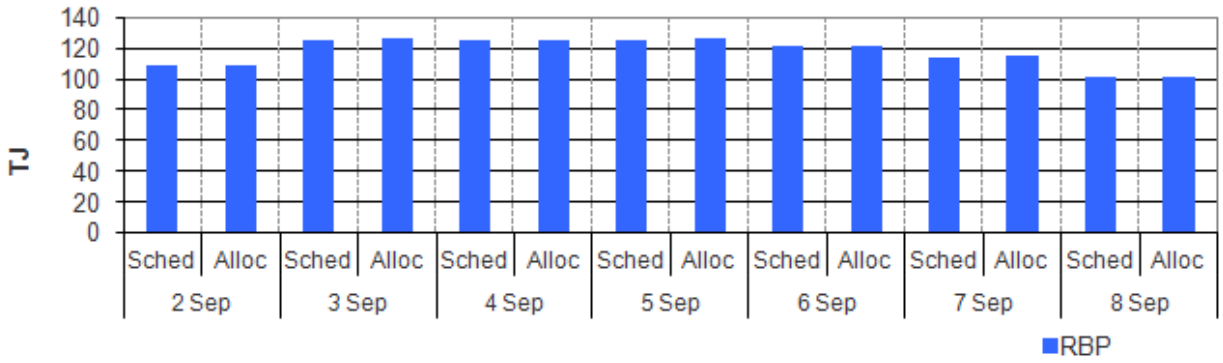


Figure 4.4 (a) BRI STTM MOS allocations (TJ)

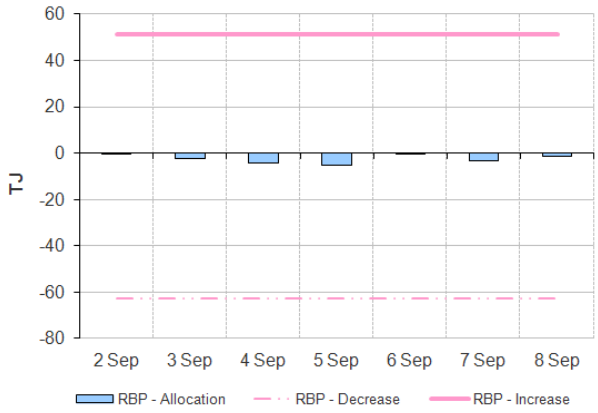
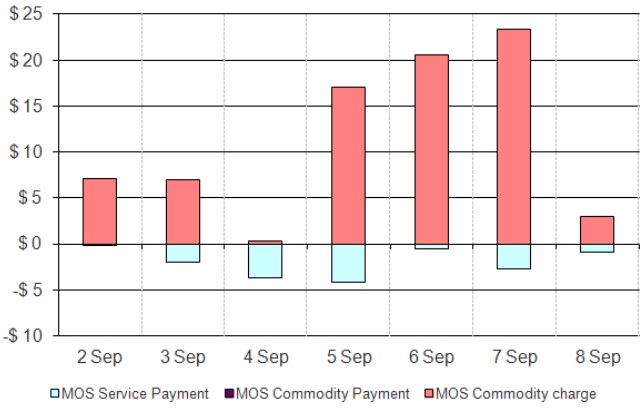


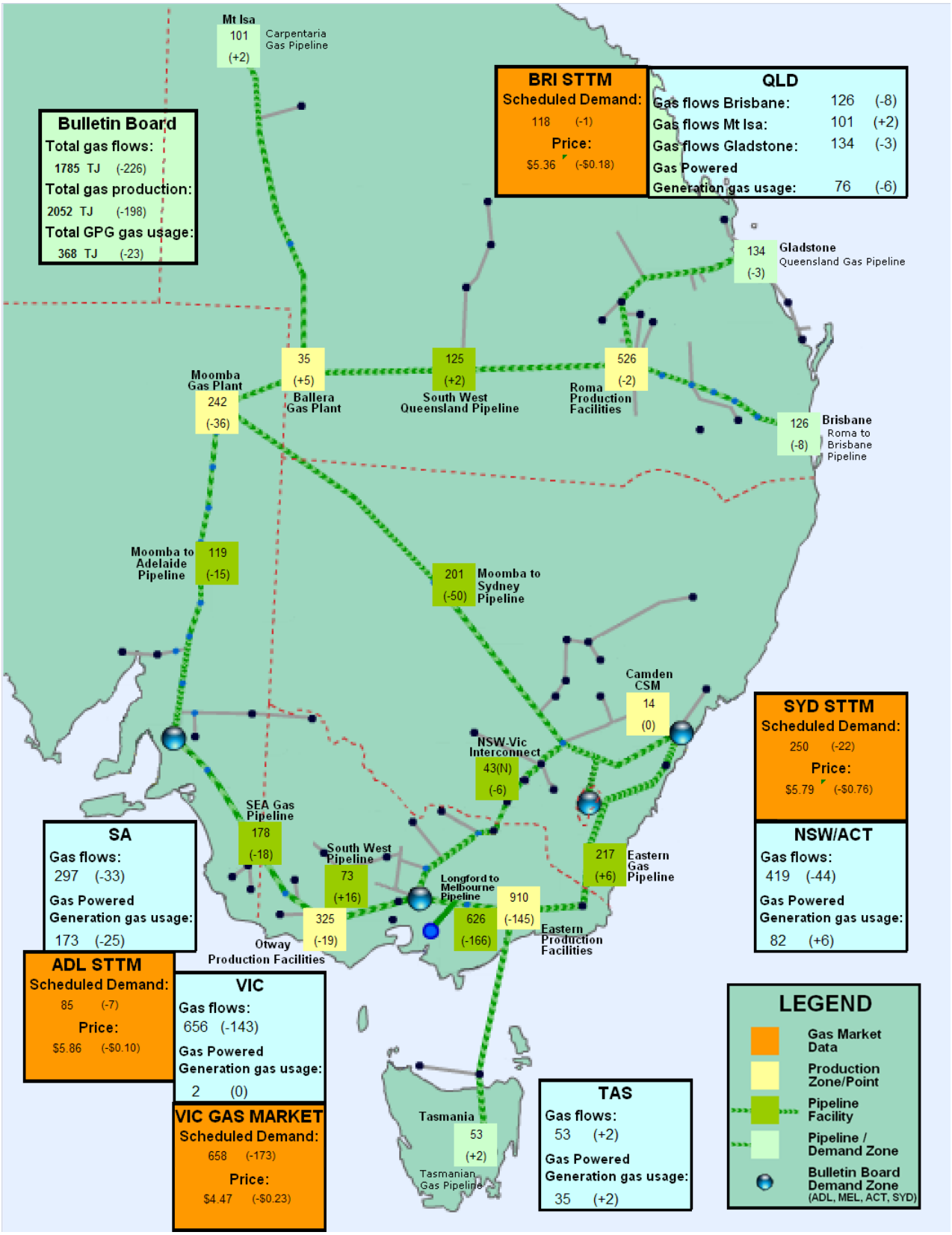
Figure 4.4 (b): Service payments and commodity payments/charges ($000)



5 National Gas Bulletin Board

Figure 5.1 shows average daily actual flows for the current week in the aqua boxes[7] 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)



[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