WEEKLY GAS MARKET ANALYSIS



30 January - 5 February 2011

Preface

As part of its monitoring roles for the National Gas Market Bulletin Board (Bulletin Board) and the Declared Wholesale Gas Market (Victorian Gas Market), the AER publishes a weekly gas market report. Part A of the report looks at gas usage and flows of registered facilities in southern and eastern Australia (as reported on the Bulletin Board). Part B provides a summary of operational and market data in the Victorian Gas Market.

The AER is responsible for monitoring and enforcing compliance with Part 20 of the National Gas Rules that authorise and govern conduct in the Short Term Trading Market (STTM). The STTM is a market for the wholesale trading of natural gas at defined hubs between pipelines and distribution systems, and began operation on 1 September 2010. With initial hubs of Sydney and Adelaide, additional hubs are intended for the future. Each hub is scheduled and settled separately, but all hubs operate under the same rules. Part C provides a summary of operational and market data in the STTM.

The Victorian Gas Market lies between the two STTM hubs and shares common production sources with the Adelaide and Sydney hubs. Participation in the Victorian Gas Market and the STTM hubs occurs on the basis of a different set of market rules and requires contractual arrangements with different pipeline owners. Participants operate in only those markets where they have production, gas and pipeline contracts. The larger number of retailers participating in the Victorian gas market reflects the increased number of retailers in Victoria. Some key differences between the STTM and the Victorian Gas Market are set out at the start of Part C.

This report will evolve over time and the nature of information presented may change. The AER welcomes feedback on the report from interested parties. Feedback can be sent to aerinquiry@aer.gov.au, with the subject title 'Comments on weekly gas report'.

Summary

Average daily prices in the Victorian market and the Sydney and Adelaide hubs are shown in figure 1.

Figure 1: Average daily price (\$/GJ) - All gas markets

30 Jan – 5 Feb	Victorian market*	STTM Sydney hub**	STTM Adelaide hub**
Average Price	3.25	2.97	3.77

^{*} weighted average daily imbalance price

^{**} ex ante market price

STTM Gas Markets (Adelaide and Sydney)

Figures S3 and S4 show that average ex ante and ex post prices at both were higher this week than the previous week. At \$2.97/GJ, the average ex ante price in Sydney was higher than the previous week (\$2.09/GJ). The average ex post price this week of \$2.95/GJ, was also higher than the previous week (\$2.31/GJ). Prices were at their highest from Wednesday 2 February to Friday 4 February, where both ex ante and ex post prices ranged from around \$3.60/GJ to just under \$4.00/GJ.

Average ex ante and ex post prices were higher in Adelaide than Sydney. At \$3.77/GJ, the average ex ante price was higher than the previous week (\$2.95/GJ). At \$3.82/GJ, the average ex post price was also higher than the previous week. However, daily ex ante and ex post prices were closely aligned in the Adelaide hub this week, with the highest prices recorded from Wednesday to Friday, ranging from \$3.93/GJ to \$4.95/GJ.

Figure S17a shows decrease market operator service (MOS) allocations of approximately 9.5 TJ on the Moomba to Sydney Pipeline and 5 TJ on the Eastern Gas Pipeline for the 1 February gas day. This resulted in MOS payments to shippers reaching a maximum of \$100 000. Furthermore, the decrease MOS allocations for this gas day resulted in MOS commodity charges to shippers of just under \$60 000 for 3 February (see figure \$17b). These charges are calculated on a day+2 basis at the day+2 ex ante price (i.e. \$3.98/GJ on the 3 February gas day).

Similarly, for the Adelaide hub, decrease MOS allocations of 4.4 TJ on the SEAGas pipeline and 2.4 TJ on the Moomba to Adelaide Pipeline resulted in \$80 000 of MOS payments for 30 January gas day (see figures S18a and S18b). These decrease MOS allocations also led to around \$26,000 of MOS commodity charges on 1 February (charged at \$3.80/GJ).

Figure S21 shows that average daily market schedule variation (MSV) charges in Sydney were substantially higher this week than the previous week (\$275.63 compared to \$27.94), but were still much lower than the financial year to date average of \$923.89. Average daily MSV charges in Adelaide were \$61.47 this week, significantly higher than the previous week (\$0.00) and the year to date average of \$20.75 (see figure S22). This was largely due to 5 TJ of MSVs and \$393.00 of MSV charges for the 30 January gas day.

Victorian Gas Market

Figure V3 shows that at 559 TJ, average daily injections into the Declared Transmission System (DTS) increased were 26 per cent higher than the previous week, while figure V6 shows that gas withdrawals in Victoria were also 26 per cent higher than the previous week. This was in line with the higher demand in Victoria, which was 28 per cent higher than the previous week (see figure N4). Consistent with this higher demand, the average daily price this week of \$3.25/GJ was higher than the previous week (\$2.78/GJ), with the highest price of \$4.71/GJ recorded on Wednesday 2 February (figure V2).

Figure V1 shows there were a larger number of participants who had injection bids scheduled on the DTS when compared to last week. This included five participants having gas scheduled at Iona injection point, compared with only two participants last week. Consistent with this, average injections at Iona increased from 9 TJ/day to 109 TJ/day (figure V3), which coincided with a larger amount of participants rebidding at Iona injection point this week (figure V5).

¹ This figure takes into account the \$136,400 of MSV charges from 1 November 2010 gas day; based on 42 TJ of market schedule variations, \$235,000 of MOS service payments and over \$2 million of MOS capacity payments. Excluding this gas day results in a year to date average of just \$61.00.

AEMO issued Supply Demand Point Constraints (SDPCs) at Longford injection point and SEAGas withdrawal point for each day this week. SDPCs were also issued at Bass Gas injection point on 30 January and at VicHub on 2 February and 3 February. AEMO did not issue any demand overrides this week. In line with the higher market clearing prices this week compared to the previous week, approximately 23 TJ and 29 TJ of Liquefied Natural Gas (LNG) injections were scheduled for Monday 31 January and Wednesday 2 January gas days. The 23 TJ scheduled on Monday was offered at \$0/GJ by Origin Energy, while all other LNG offers were above \$4/GJ. In the previous week, all LNG offers were above \$4/GJ, but none of was scheduled.

National Gas Market Bulletin Board

Erroneous flow data was provided for the Tasmanian Gas Pipeline on the 2 February (1038 TJ) and 3 February (1008 TJ) gas days. This data has been excluded from information and analysis in this report, and replaced with the average flow amount from the remaining days in the week. The replacement values are shown in red in figure A1.

Figure N4 shows this week's total average daily gas demand, gas production and GPG usage across the Bulletin Board was higher than the previous week. Total demand was 18 per cent higher at 1757 TJ/day. While there was higher demand in Victoria and New South Wales compared to the previous week, the most significant difference was in South Australia where demand was 37 per cent higher than the previous week.

In line with higher demand, production volumes were higher across all Bulletin Board this week compared to the previous week. Production at the Otway facilities was 113 per cent higher than the previous week and was slightly higher in Eastern Victoria.

Kincora gas plant in the Roma region recommenced operations for the first time since the recent floods in Queensland, producing up to 15 TJ/day this week. Volumes of around 3 to 4 TJ/day are also being produced at Wallumbilla (Roma). Higher demand in Sydney and Adelaide compared to the previous week was met by higher output at Moomba and Roma, with Ballera recording lower production volumes than the previous week.

As a result of the higher production at the Otway region, flows on the South West Pipeline into Victoria and SEAGas Pipeline into South Australia were higher than the previous week. Gas used for electricity generation was also higher than the previous week, with substantial increases in Victoria, South Australia and New South Wales, consistent with the high demand in the National Electricity Market (NEM) from 31 January to 2 February due to high temperatures in those regions. Flow capacity on the Roma to Brisbane Pipeline remains at 187 TJ/day, which is just short of its maximum nameplate capacity of 219 TJ/day

Part A: National Gas Market Bulletin Board

Overview of pipeline and production flows

Figure N1 sets out the average daily pipeline flows into each key demand region across the National Gas Market. A list of pipeline facilities for each demand region is provided in Figure A1 of the Appendix.

Figure N1: Average daily pipeline flows (TJ) into each demand region

							QLD	_
Average daily flows	NSW	ACT	VIC	SA	TAS	Brisbane	Mt Isa	Gladstone
30 Jan – 5 Feb	406	4	544	404	46	171	67	115
Financial Year-to-date 2010-11*	386	23	621	290	45	172	94	109
Financial Year-to-date 2009-10**	373	22	588	283	37	167	86	70

^{*}Average daily estimated gas consumption measured from 1 July 2010 to the current week (inclusive)

Figure N2 provides the average daily amount of gas used for GPG (gas-powered generators) in each state.

Figure N2: Average daily gas (TJ) used by gas-powered generators in each state

Average daily gas for GPG usage^	NSW	VIC	SA	TAS	QLD
30 Jan – 5 Feb	172	195	315	31	151
Financial Year-to-date 2010-11*	90	26	171	30	156
Financial Year-to-date 2009-10**	84	45	164	22	159

[^]Estimated values based on application of implied heat rates for generators within the demand region sourced from ACIL Tasman's 2009 Final Report 'Fuel resource, new entry and generation costs in the NEM'

Notes: Data for each state collected on the following basis:

- 1. NSW Smithfield Energy, Uranquinty, Hunter Valley GT, Colongra and Tallawarra power stations.
- 2. VIC Laverton North, Valley Power, Jeeralang A, Jeeralang B, Somerton, Bairnsdale, and Newport power stations.
- 3. SA Dry Creek GT, Hallet, Pelican Point, Torrens Island, Mintaro, Osborne, Ladbroke Grove, and Quarantine power stations.
- 4. TAS Tamar Valley power stations.
- 5. QLD Braemar 1, Braemar 2, Roma, Oakey, Barcaldine, and Swanbank power stations.

Figure N3 sets out the daily average flows from production and storage facilities from each production zone across the National Gas Market. A list of production/storage facilities for each zone is provided in Figure A2.

Figure N3: Daily average production flows (TJ) for each production zone

Average daily flows	Roma (QLD)	Eastern Victoria	Otway Basin (VIC)	Moomba (SA/QLD)
16 Jan – 22 Jan	551	699	311	321
Financial Year-to-date 2010-11*	536	786	275	289
Financial Year-to-date 2009-10**	446	691	288	283

^{*}Average daily estimated gas consumption measured from 1 July 2010 to the current week (inclusive)

Figure N4 shows the changes in average daily pipeline and production flows compared to the previous week, as well as the gas demand and GPG usage of gas in each region.

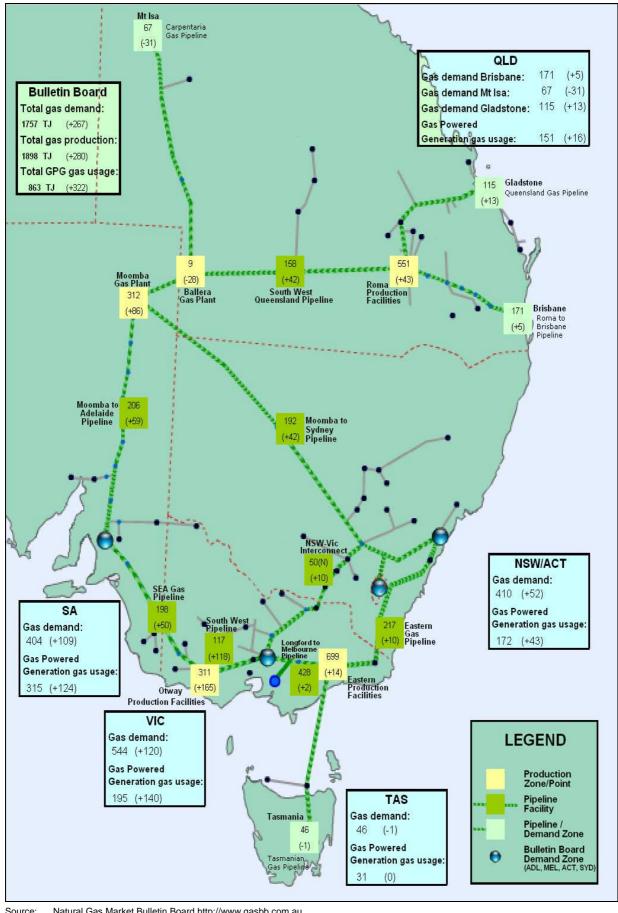
^{**}Average daily estimated gas consumption measured from 1 July 2009 to the equivalent week in 2009-10 (inclusive) Source: National Gas Market Bulletin Board http://www.gasbb.com.au

^{*}Average daily estimated gas consumption measured from 1 July 2010 to the current week (inclusive)

^{**}Average daily estimated gas consumption measured from 1 July 2009 to the equivalent week in 2009-10 (inclusive) Source: http://www.aemo.com.au

^{**}Average daily estimated gas consumption measured from 1 July 2009 to the equivalent week in 2009-10 (inclusive) Source: National Gas Market Bulletin Board http://www.gasbb.com.au

Figure N4: Gas production/consumption and pipeline flows (TJ) (changes from the previous week are shown in brackets)



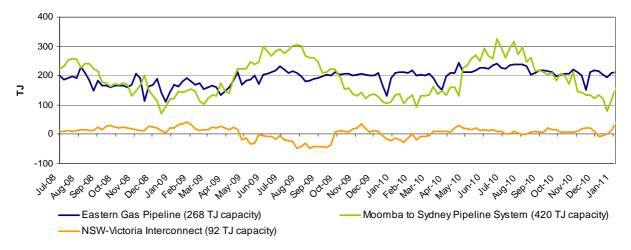
Source: Natural Gas Market Bulletin Board http://www.gasbb.com.au Notes:

Direction of aggregate daily flows along the NSW-Vic Interconnect indicated on map by S (South) or N (North). Numbers in brackets indicate a change in average daily flow from the previous week.

Gas flows into demand regions

The figures below provide the average daily flows into each of the demand regions served by multiple pipelines and supply sources.

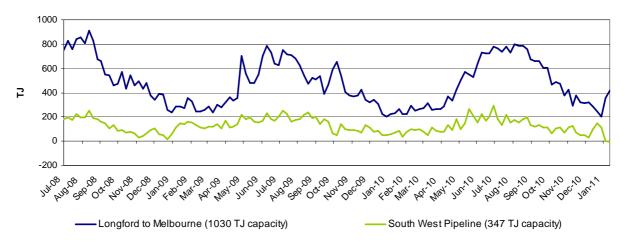
Figure N5: Average daily flows (TJ) into NSW/ACT demand region



Source: Natural Gas Market Bulletin Board http://www.gasbb.com.au

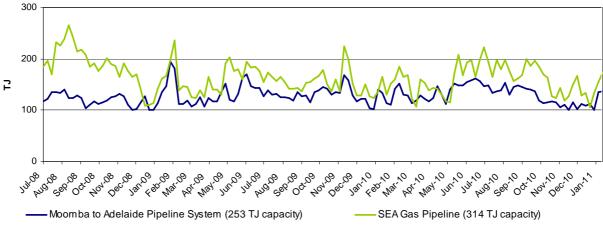
Notes: Negative flows on the NSW-Victoria Interconnect represent flows out of NSW into VIC.

Figure N6: Average daily flows (TJ) into VIC demand region



Source: Natural Gas Market Bulletin Board http://www.gasbb.com.au
Notes: Negative flows on the South West Pipeline represent flows out of the VPTS and back into storage at Iona.

Figure N7: Average daily flows (TJ) into SA demand region



Source: Natural Gas Market Bulletin Board http://www.gasbb.com.au

Part B: Victorian Gas Market

Participation in the market

Figure V1 shows participant bids submitted at the start of the gas day (6 am) at injection and withdrawal points on the Victorian Declared Transmission System (DTS). The orange shaded boxes indicate that the participant submitted bids at that location on at least one occasion during the week. An "S" indicates that some of this nominated gas was scheduled into the gas market, while "NS" indicates that none of the gas was scheduled. Green shading indicates where a change has occurred from the previous week.

Bids are scheduled in price merit order — this means injection bids which are less than the market clearing price will be scheduled, while withdrawal bids which are greater than the market clearing price will be scheduled into the market.

Figure V1: Injection and withdrawal point bids in the VIC Gas Market^

Market Participant	Participant type	No. of injection / withdrawal		ı	njectio	n bid	s in th	e VPT	S		bi	Withd	Irawal he VP	
		bid points	BassGas	Culcairn	IONA	LNG	Longford	SEA Gas	VicHub	Otway	Culcairn	IONA	SEA Gas	VicHub
AETV Power	Trader	1							S					S
AGL (Qld)	Retailer	1				NS								
AGL	Retailer	4			S	NS	S		NS			S		
Aurora Energy	Retailer	1					S							
Aust. Power & Gas	Retailer	3			NS	NS	S					S		
Coogee Energy	Transmission Customer	1					S							
Country Energy	Transmission Customer	1		S										
Energy Australia	Retailer	2					S		NS					NS
International Power	Transmission Customer	1											S	
Lumo Energy	Retailer	3		S		NS			S		S			
Lumo Energy	Trader	2			S				NS			S		S
Origin (Vic)	Retailer	5	S	NS	S	S	S				S	S		
Origin (Uranquinty)	Trader	1					S							
Red Energy	Retailer	1					S							
Santos	Retailer	1							S					
Simply Energy	Retailer	4			S	NS	S	S				S		
TRU Energy	Retailer	3			S	NS	S					NS		
Visy Paper	Distribution Customer	2					S				S			

^Bids taken from 6 am data for each gas day during the current week.

Source: http://www.aemo.com.au (INT131)

Market Prices

Figure V2 displays volume-weighted average daily imbalance prices, compared to the 2010-11 financial year-to-date average and the 2009-10 financial year-to-date equivalent as well as daily imbalance prices for each day during the current week.

The daily average market price is a volume weighted imbalance price taking account of trading amounts at five times through the gas day — 6 am, 10 am, 2 pm, 6 pm and 10 pm.

Figure V2: Imbalance Weighted Prices (\$/GJ)

	30 Jan – 5 Feb	23 Jan – 29 Jan 2010-11 Financial YTD*			9-10 al YTD**			
Average daily price	3.25	2.78		,	1.96	1.58		
							_	
16 Jan – 22 Jan	Sun	Mon	Tue	Wed	Thu	Fri	Sat	
Daily price	2.91	3.89	2.92	4.71	3.73	2.15	2.43	

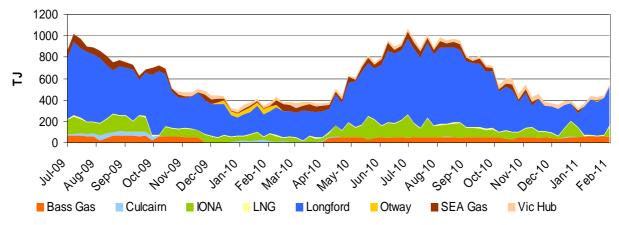
^{*}Average daily imbalance weighted average price from 1 July 2010 to the current week (inclusive)

System Injections

Figure V3 shows the average daily injections into the DTS for the current and previous week, compared with the 2010-11 and 2009-10 equivalent financial year-to-date daily averages.

Figure V3: Average daily flows (TJ) from Injection Points on the DTS

Injection Point:	30 Jan – 5 Feb	23 Jan – 29 Jan	2010-11 Financial YTD*	2009-10 Financial YTD**
Culcairn	0	0	1	18
Longford	359	344	439	394
LNG	16	9	9	8
IONA	109	9	78	86
VicHub	17	26	32	15
SEAGas	3	0	28	39
Bass Gas	54	56	49	37
Otway	0	0	0	10
TOTAL	559	445	636	608



^{*}Average daily estimated gas consumption measured from 1 July 2010 to the current week (inclusive)

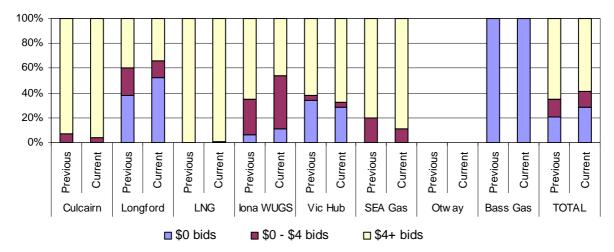
^{**}Average daily imbalance weighted average price from 1 July 2009 to the equivalent week in 2009-10 (inclusive) Source: http://www.aemo.com.au (INT 041)

^{**}Average daily estimated gas consumption measured from 1 July 2009 to the equivalent week in 2009-10 (inclusive) Source: http://www.aemo.com.au (INT 150)

Bidding Activity

Figure V4 compares the price structure of gas bid at each of the injection points on the VPTS, within three price bands of \$0/GJ, \$0/GJ to \$4/GJ, and \$4/GJ and above, for the current week and for the previous week.

Figure V4: Price structure of bids by injection points



Source: http://www.aemo.com.au (INT 131) - bids submitted for the 6am schedule on each day of the week.

Notes: Figures in the table are rounded off the nearest round number (TJ); the maximum allowable bid is \$800/GJ.

Figure V5 provides a table of injection points on the DTS where market participants submitted intra-day renominations, for each day of the week.

Figure V5: Intra-day rebidding of gas injections

Injection Point:	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Culcairn		CE Lumo		CE		Lumo	
Longford	AGL TRU	AGL		AGL		TRU	AGL TRU
LNG		Lumo	Lumo	TRU APG	AGL	AGL (QLD)	
lona	AGL Origin TRU Simply Lumo	Origin TRU APG Simply Lumo	Origin TRU APG Simply Lumo	TRU Simply Lumo	AGL TRU Simply Lumo	AGL Origin TRU Lumo	Origin TRU
VicHub	AETV	AETV Lumo	AETV Santos Lumo Lumo	AGL Santos Lumo	AGL Santos Lumo	AETV Lumo	AETV Lumo
SEAGas		Simply	Simply	Simply	Simply	Simply	Simply
Bass Gas							

Source: http://www.aemo.com.au (INT 131)

Notes: Origin = Origin Energy | AGL = AGL Sales | TRU = TRUenergy | Simply = Simply Energy | AETV = AETV Power |
APG = Australian Power & Gas | CE = Country Energy | Lumo = Lumo Energy (formerly Victoria Electricity) |
AGL (QLD) = AGL Sales (Queensland) | Red = Red Energy |

System withdrawals

Figure V6 shows the average daily gas usage on the DTS for the current and previous week, compared with the 2010-11 and 2009-10 equivalent financial year-to-date daily averages.

Figure V6: Average daily withdrawals (TJ) from system demand zones on the DTS

System withdrawal zone:	30 Jan – 5 Feb	23 Jan – 29 Jan	2010-11 Financial YTD*	2009-10 Financial YTD**
Ballarat	9	10	26	24
Geelong^	104	92	91	82
Gippsland	90	32	46	47
Melbourne	281	248	420	401
Northern	79	67	64	54
TOTAL	563	448	647	608

[^]Data presented also includes withdrawals for the Western system withdrawal zone or Western Transmission System (WTS).

^{*}Average daily estimated gas consumption measured from 1 July 2010 to the current week (inclusive)
**Average daily estimated gas consumption measured from 1 July 2009 to the equivalent week in 2009-10 (inclusive) Source: http://www.aemo.com.au (INT 150).

Part C: STTM MARKET DATA

What is the STTM?

The STTM is a market for the trading of natural gas at the wholesale level at defined hubs between pipelines and distribution systems. Currently the STTM has two hubs: Sydney and Adelaide.

The AER first commenced reporting on the STTM in September. The report deliberately contains a significant amount of information on the STTM. It is envisaged that over time as readers become familiar with the market, the amount of information will be reduced, while being mindful not to compromise the quality of the report.

Although the STTM and Victorian gas markets (discussed in Part B of this report) are both spot markets for gas, there are a number of key differences. Some of these differences are listed in the table below.

Key area of difference	Victoria Gas Market	STTM
AEMO role	 Wholesale market operator, Retail market operator, Transmission pipeline system operator 	Wholesale market operator,Retail market operator
Scheduling	 On the day scheduling comprising five pricing and operating schedules at set times. Ad hoc schedules if required. Day ahead and 2-Day ahead schedules (forecast data only). 	 Day ahead market schedules Shippers may vary from their market schedules when they nominate to pipeline operators 2-Day ahead and 3-Day ahead schedules (forecast data only).
Market Price	 Five ex ante prices for imbalances set on the day Ex ante prices in subsequent schedules after the 6am schedule apply to deviations Market price is for commodity only. Transportation is charged separately by pipeline owner 	 One ex ante market price set the day before the gas day One ex post imbalance price set the day after the gas day Price includes both commodity and delivery to the hub and represents purchase of gas at the hub
Linepack management (pipeline balancing mechanism)	 AEMO defines linepack target depending on operational conditions and is generally set seasonally not daily. Linepack account covers costs that includes costs of day to day linepack variations 	On the day pipeline balancing through Market Operator Service (MOS), provided by MOS offers from shippers
Transmission pipeline constraint management	 Ancillary payments for higher priced gas scheduled that relieves constraints Uplift payments to fund ancillary payments 	Capacity payments from shippers with non-firm contracts to shippers with firm contracts if a pipeline is constrained (based on the pipeline capacity price)

AEMO's website (<u>www.aemo.com.au</u>) contains documents that provide further detail on how the STTM works, including a glossary of terms.

Participation in the market

Figures S1 and S2 show participant supply offers and withdrawal bids submitted in the Sydney and Adelaide STTM hubs. The orange shaded boxes indicate that the participant submitted offers and bids at that location on at least one occasion during the week. An "S" indicates that some of this gas was scheduled into the gas market, while "NS" indicates that none of the gas was scheduled. Green shading indicates where a change has occurred from the previous week.

Offers and Bids are scheduled in price merit order—this means offers that are less than the market clearing price will be scheduled, while withdrawal bids that are greater than the market clearing price will be scheduled into the market.

Figure S1: Supply Offers and Withdrawal Bids (Sydney Hub)^

Trading Participant	Participant type	No. of		Offers	i		Bi	ds	
		supply offers / withdrawal bid points	EGP	MSP	ROS	EGP	MSP	ROS	SYD - NET
AETV Power	Shipper	1	S			S			
AGL Energy Sales & Marketing Limited	STTM User,Shipper	4	S	S	S				S
AGL Wholesale Gas Limited	Shipper	2	S	NS					
BHP Billiton Petroleum (Bass Strait) PL	Shipper								
BlueScope Steel	STTM User,Shipper	1	S						
Country Energy	STTM User,Shipper	2	S				S		
Delta Electricity	STTM User,Shipper	2	S						S
EnergyAustralia	STTM User,Shipper	2	S	S					
Esso Australia Resources Pty Ltd	Shipper								
Lumo Energy (NSW) Pty Ltd	STTM User								
Lumo Energy Australia Pty Ltd	Shipper	1				S			
OneSteel Manufacturing Pty Ltd	STTM User,Shipper	1	S						
OneSteel NSW Pty Ltd	STTM User,Shipper	1	S						
Origin Energy LPG Limited	STTM User,Shipper								
Origin Energy Retail Ltd	STTM User,Shipper	1		S					
Santos Direct Pty Ltd	STTM User,Shipper	1	S						
TRUenergy Pty Ltd	STTM User,Shipper	2	S	S		S			
Tyco Water	STTM User	_							

[^]Offers and bids taken from the (D-1) ex ante schedule

[^]STTM Users also submit price-taker bids to satisfy customer demand, which are not included in this table Source: http://www.aemo.com.au INT 651, 659, 668

EGP=Eastern Gas Pipeline, MSP=Moomba to Sydney Pipeline, ROS=Rosalind Park Production facility, SYD-NET=Sydney Hub

Figure S2: Supply Offers and Withdrawal Bids (Adelaide Hub)^

Trading Participant	Participant type	No. of	Off	ers		Bids	
		supply offers / withdrawal bid points	MAP	SEAGAS	MAP	SEAGAS	ADL - NET
AGL South Australia Pty Limited	STTM User,Shipper	1	S				
AGL Wholesale Gas (SA) Pty Ltd	Shipper	2	S	S			
Adelaide Brighton Cement Ltd	STTM User,Shipper	1	S				
Lumo Energy (SA) Pty Ltd	STTM User						
Lumo Energy Australia Pty Ltd	Shipper						
OneSteel Manufacturing Pty Ltd	Shipper						
Origin Energy Retail Ltd	STTM User,Shipper	2	S	S			
Pelican Point Power Limited	Shipper						
Simply Energy	STTM User,Shipper	2	NS	S	S		
TRUenergy Pty Ltd	STTM User,Shipper	2	S	S		NS	

[^] Offers and bids taken from the (D-1) ex ante schedule

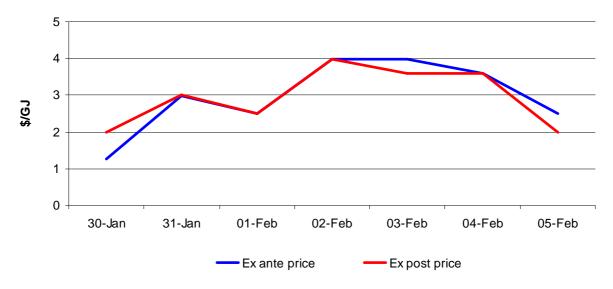
Ex ante and Ex post Market Prices

Figures S3 and S4 show ex ante and ex post prices at the Sydney and Adelaide Hubs. Differences between the ex ante and ex post price may arise where there are significant differences between price taker bids (demand forecasts) for the hub and actual demand in the hub. When this occurs, this leads to more or less gas being scheduled in the ex post market and a divergence between the ex ante and ex post prices.

Figure S3: Ex ante vs Ex post Price - Sydney Hub (\$/GJ)^

	30 Jan – 5 Feb	23 Jan – 29 Jan	2010-11 Financial YTD*
Ex ante price	2.97	2.09	2.52
Ex post price	2.95	2.31	7.02

^{*}Financial Year to date figures exclude market trial data (year-to-date from 1 September 2010)



Source: http://www.aemo.com.au INT 651, 657

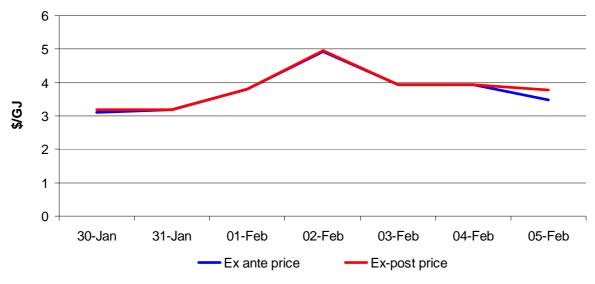
[^] STTM Users also submit price-taker bids to satisfy customer demand, which are not included in this table Source: http://www.aemo.com.au INT 651, 659, 668

MAP=Moomba to Adelaide Pipeline, SEAGAS=SEA gas pipeline, ADL-NET=Adelaide Hub

Figure S4: Ex ante vs Ex post Price - Adelaide Hub (\$/GJ)

	16 Jan – 22 Jan	9 Jan – 15 Jan	2010-11 Financial YTD*
Ex ante price	3.77	2.95	2.72
Ex post price	3.82	2.94	2.84

^{*} Financial Year to date figures exclude market trial data (year-to-date from 1 September 2010)



Source: http://www.aemo.com.au INT 651, 657

Scheduled gas

"Firm" and "non-firm" gas is scheduled to the STTM hubs. Firm capacity describes a facility contract that has the highest haulage priority. Non-firm (as available) capacity refers to facility contracts with lower order priority.

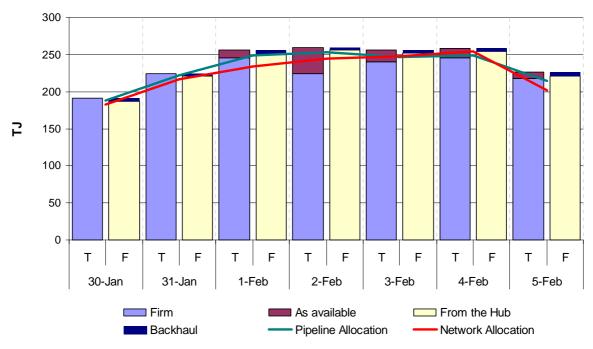
Gas can also be scheduled from the STTM hubs. This happens when Shippers "backhaul" gas from the hub or Users bid to take gas from the hub (including price taker bids).

Figures S5 and S6 show scheduled versus allocated gas at each hub. To understand the figures, the quantities of firm and non-firm gas scheduled via offers to the hub are indicated by the columns marked "T" (or **to** the hub). Firm offers are indicated by light purple shading and as available gas is indicated by maroon shading. Bids to take gas from the hub are indicated by columns marked "F" (or **from** the hub). User bids are indicated by light yellow shading and backhaul is indicated by dark blue shading.

The red line shows network (or in other words hub or demand side) allocations and the green line shows pipeline allocations. Allocations show actual gas flows for the day based on pipeline and network metered data.

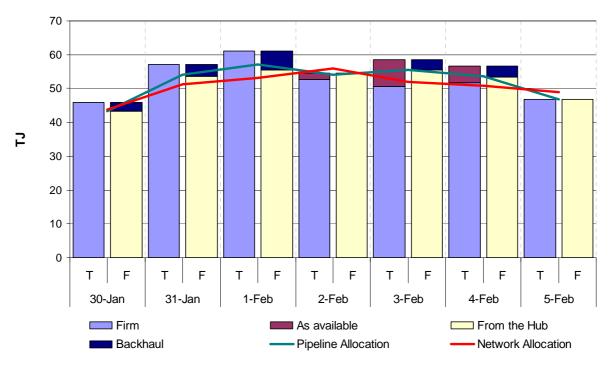
By comparing the level of the red line to the columns marked "F", it can be shown whether demand (allocation) was higher than scheduled. Similarly, comparing the green line to the columns marked "T" shows how the actual flow of gas (allocation) compared to what was scheduled.

Figure S5: Allocated vs scheduled ex ante quantity - Sydney Hub (TJ)^



Source: http://www.aemo.com.au INT 651, 652, 658 and 664 (MOS allocations removed)

Figure S6: Allocated vs scheduled ex ante quantity - Adelaide Hub (TJ)



Source: http://www.aemo.com.au INT 651, 652, 658 and 664 (MOS allocations removed)

Pipeline Facility Allocations

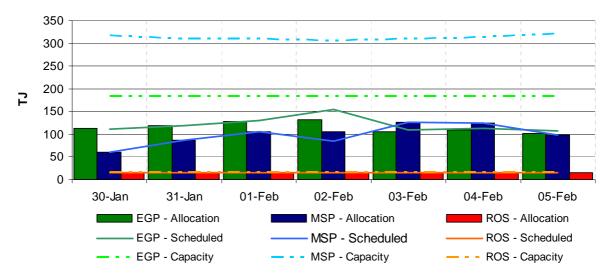
A number of pipelines supply the Adelaide and Sydney hubs. Figures S7 and S8 show, for each hub, the allocation (or actual flow) of gas to each of the pipeline facilities supplying the hub, the quantity of gas scheduled (ex ante) on the pipeline and the capacity of the pipeline.

For a gas day, the pipeline operator delivers gas to the hub, and users withdraw gas from the hub. However, the quantities delivered to or withdrawn from the hub may not, and generally will not, match with the ex ante schedules. In addition, during the day, as gas requirements

become better known, and if permitted by their contracts, shippers may renominate quantities ("intraday nominations") with their pipeline operators.

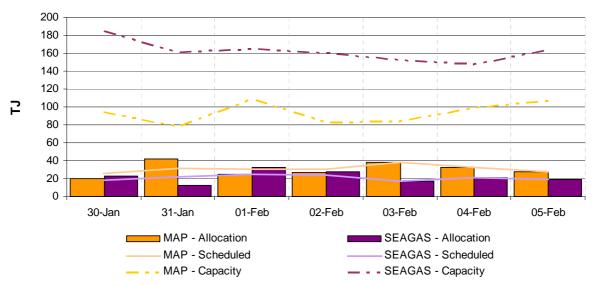
Differences between the amount of gas scheduled and what was actually allocated can result in variations between the ex ante and ex post price, as the ex post price is related to the offers actually allocated while ex ante is related to the offers scheduled.

Figure S7: Allocated vs scheduled pipeline quantities - Sydney Hub (TJ)



Source: http://www.aemo.com.au INT 652, 653, 658 and 664 (MOS allocations removed)
EGP=Eastern Gas Pipeline, MSP=Moomba to Sydney Pipeline, ROS=Rosalind Park production facility

Figure S8: Allocated vs scheduled pipeline quantities - Adelaide Hub (TJ)



Source: http://www.aemo.com.au INT 652, 653, 658 and 664 (MOS allocations removed) MAP=Moomba to Adelaide Pipeline, SEAGAS=SEA gas pipeline

Offers and Bids

Trading Participants submit offers to sell gas into an STTM hub and withdrawal bids to take gas from a hub. Figures S9 and S11 show for the Sydney and Adelaide hubs respectively, total offers within various price bands for the current week compared to the previous week for each of the pipeline facilities.

Figures S10 and S12 show for the Sydney and Adelaide hubs respectively, total bids within various price bands for the current week compared to the previous week for each of the pipeline facilities and the hubs themselves (NETSYD1 and NETADL1).

These figures also include information on price-taker bids. A price-taker bid is a bid for a quantity of gas that the user will accept at any price. Only STTM users are able to place price-taker bids, that is, to purchase gas at any price. These bids (which represent customer demand forecasts) must be submitted on a daily basis. Price-taker bid data is read against the right-hand-side axis.

Because scheduling is price-driven, offers for lower-priced gas are scheduled ahead of offers for higher-priced gas and bids for higher-priced gas are scheduled ahead of bids for lower-priced gas.

1800 1600 1400 1200 1000 800 600 400 200

Previous

<=1.50

<=100

MSP

<=2

=<=300

Current

<=3

<=399

Previous

Current

ROS

■<=399.50 **■**<=400

<=6

Figure S9: Total weekly Sydney hub offers (TJ) within price bands (\$/GJ)

Source: http://www.aemo.com.au INT 652, 659

Previous

= 0

<=8

EGP

<=0.50

<=10

EGP=Eastern Gas Pipeline, MSP=Moomba to Sydney Pipeline, ROS=Rosalind Park Production facility

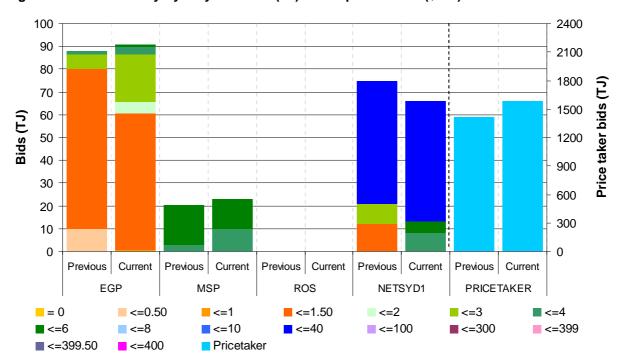


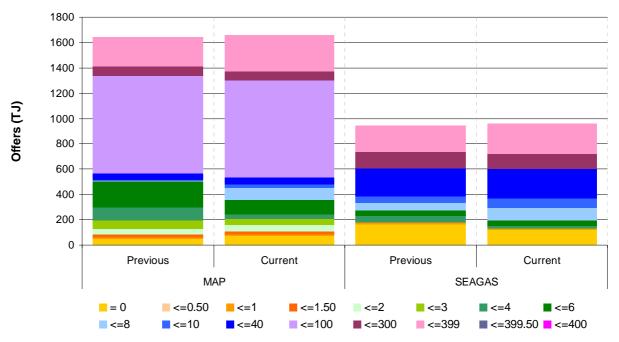
Figure S10: Total weekly Sydney hub bids (TJ) within price bands (\$/GJ)

Current

Source: http://www.aemo.com.au INT 652, 659

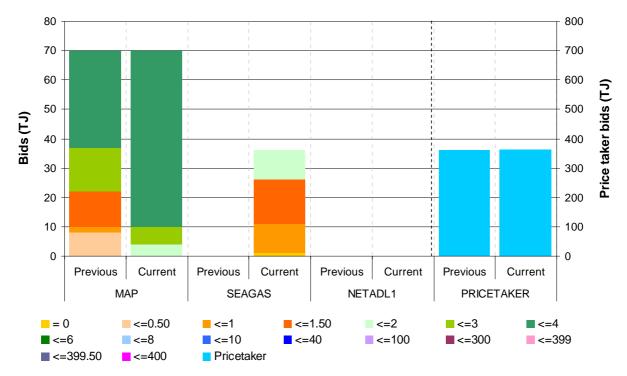
EGP=Eastern Gas Pipeline, MSP=Moomba to Sydney Pipeline, ROS=Rosalind Park Production facility, NETSYD1=Sydney Hub

Figure S11: Total weekly Adelaide hub offers (TJ) within price bands (\$/GJ)



Source: http://www.aemo.com.au INT 652, 659 MAP=Moomba to Adelaide Pipeline, SEAGAS=SEA gas pipeline

Figure S12: Total weekly Adelaide hub bids (TJ) within price bands (\$/GJ)



Source: http://www.aemo.com.au INT 652, 659 MAP=Moomba to Adelaide Pipeline, SEAGAS=SEA gas pipeline, NETADL1=Adelaide Hub

Re-offers and re-bids

In the STTM, offers and bids must first be submitted three days before the gas day (D-3), leading to an initial provisional price and schedule for the gas day. Re-offers and re-bids are then allowed for the D-2 schedule and finally for the D-1 "ex ante" schedule.

Re-offers and re-bids can lead to significant changes between D-3 and D-2 provisional prices and the ex ante price. Figures S13, S14, S15 and S16 show the participants that made inter-day re-offers and re-bids at the hubs for the different pipeline facilities.

Figure S13: Inter-day resubmission of offers at Sydney Hub

Pipeline	Schedule	Sun	Mon	Tue	Wed	Thu	Fri	Sat
	D-3 to D-2	BluSc EA OneStl(NSW) SANTOS	EA		EA OneStl(NSW) SANTOS	AGL(WG) EA OneStl(NSW)	AETV AGL(WG) EA	AETV AGL(ESM) OneStl(NSW) SANTOS
EGP	D-2 to D-1	Country EA		BluSc Country Delta EA OneStl(NSW) SANTOS	AGL(WG) BluSc Delta EA OneStl(NSW) SANTOS	AETV AGL(ESM) AGL(WG) BluSc Delta EA SANTOS	AETV AGL(ESM) BluSc Country Delta EA OneStl(NSW) SANTOS TRU	AGL(ESM) BluSc Delta EA SANTOS TRU
MSP	D-3 to D-2	AGL(ESM) EA Origin TRU	AGL(ESM) Origin TRU	AGL(ESM) Origin TRU	AGL(ESM) EA Origin TRU	AGL(ESM) EA Origin TRU	AGL(ESM) EA Origin TRU	AGL(ESM) Origin TRU
	D-2 to D-1	AGL(ESM) TRU	AGL(ESM) Origin TRU	AGL(ESM) EA Origin TRU	AGL(ESM) EA Origin TRU	AGL(ESM) EA Origin TRU	AGL(ESM) EA Origin TRU	AGL(ESM) EA Origin TRU
ROS	D-3 to D-2		AGL(ESM)			AGL(ESM)		
	D-2 to D-1	AGL(ESM)			AGL(ESM)			AGL(ESM)

Source: http://www.aemo.com.au INT 659

Blusc= BlueScope Steel I Country= Country Energy I Origin=Origin Energy Retail Ltd I TRU= TRUenergy Pty Ltd I AGL(WG)= AGL Wholesale Gas Limited I EA=EnergyAustralia I OneStl(NSW)= OneSteel NSW Pty Ltd I

SANTOS= Santos Direct Pty Ltd I AGL(ESM)= AGL Energy Sales & Marketing Pty Ltd I Lumo = Lumo Energy Australia Pty Ltd | EGP=Eastern Gas Pipeline, MSP=Moomba to Sydney Pipeline, ROS=Rosalind Park Production facility

Figure S14: Inter-day resubmission of bids at Sydney Hub

Pipeline	Schedule	Sun	Mon	Tue	Wed	Thu	Fri	Sat
EGP	D-3 to D-2			TRU	AETV Lumo Energy Australia Pty Ltd	AETV Lumo Energy Australia Pty Ltd	AETV Lumo Energy Australia Pty Ltd	AETV Lumo Energy Australia Pty Ltd
EGP	D-2 to D-1			AETV Lumo Energy Australia Pty Ltd	Lumo Energy Australia Pty Ltd	AETV Lumo Energy Australia Pty Ltd	AETV Lumo Energy Australia Pty Ltd	AETV Lumo Energy Australia Pty Ltd
MSP	D-3 to D-2							Country
WISF	D-2 to D-1	Country		Country		Country	Country	Country
NETSYD1	D-3 to D-2							
NEISTOI	D-2 to D-1							
ROS	D-3 to D-2							
ROS	D-2 to D-1	INIT 050						Country

Source: http://www.aemo.com.au INT 659

Country Energy | AETV = Aurora Energy Tamar Valley | Country Energy | TRU= TRUenergy Pty Ltd | EGP=Eastern Gas Pipeline, MSP=Moomba to Sydney Pipeline, ROS=Rosalind Park Production facility, NETSYD1=Sydney Hub

Figure S15: Inter-day resubmission of offers at Adelaide Hub

Pipeline	Schedule	Sun	Mon	Tue	Wed	Thu	Fri	Sat
MAP	D-3 to D-2	AGL(SA) Origin Simply TRU	AGL(SA) Origin Simply TRU	AGL(SA) Origin	ABC AGL(SA) AGL(WGSA) Origin Simply	ABC AGL(SA) Origin	ABC AGL(SA) Origin	AGL(SA) Origin
WAP	D-2 to D-1	ABC AGL(SA) Origin Simply	ABC AGL(SA) AGL(WGSA) Origin	ABC AGL(SA) AGL(WGSA) Origin Simply	ABC AGL(SA) Origin	ABC AGL(SA) Origin TRU	AGL(SA) Origin TRU	ABC AGL(SA) Origin Simply
SEA-GAS	D-3 to D-2	AGL(WGSA) Origin Simply TRU	TRU	Origin TRU	Origin Simply TRU	AGL(WGSA) Origin Simply TRU	AGL(WGSA) Origin TRU	Simply TRU
JEA-GAS	D-2 to D-1		Origin	Origin Simply TRU	AGL(WGSA) Origin Simply TRU	AGL(WGSA) Origin TRU	Simply TRU	Origin Simply TRU

Source: http://www.aemo.com.au INT 659

ABC= Adelaide Brighton Cement Ltd I AGL(WGSA)= AGL Wholesale Gas (SA) Pty Ltd I Origin=Origin Energy Retail Ltd I

Simply= Simply Energy I TRU= TRUenergy Pty Ltd I AGL(SA)= AGL South Australia Pty Limited I

MAP=Moomba to Adelaide Pipeline, SEAGAS=SEA gas pipeline

Figure S16: Inter-day resubmission of bids at Adelaide Hub

Pipeline	Schedule	Sun	Mon	Tue	Wed	Thu	Fri	Sat
	D-3 to D-2		Simply			Simply		
MAP	D-2 to D-1	Simply	Simply	Simply	Simply			Simply
NETADIA	D-3 to D-2							
NETADL1	D-2 to D-1							
SEA-GAS	D-3 to D-2							
SEA-GAS	D-2 to D-1							

Source: http://www.aemo.com.au INT 659

Simply= Simply Energy

Market Operator Service

The Market Operator Service (MOS) is a daily mechanism for allocating balancing gas provided by pipelines to maintain pressures at receipt points. This balancing gas is the difference between what was scheduled by a pipeline operator (the pipeline schedule) and the actual quantities of gas that flowed on a pipeline on the day.

MOS offers are made by participants who have contracts with pipeline facilities to "park" gas (on the pipeline) or "loan" gas (from the pipeline). Based on these contracts, two types of MOS are offered: increase offers to increase flows on a pipeline to a hub; and decrease offers to decrease flows on a pipeline to a hub. Where a pipeline deviation² occurs on a gas day and there is a requirement for MOS from a MOS provider (either an increase or decrease offer), the MOS provider is paid according to their MOS offer price (the MOS service payment).

In addition, where this MOS service is required, AEMO pays or charges the MOS provider for the MOS gas allocation on the gas day at the ex ante market price two days after the gas day, which covers the cost of restoring its inventory of MOS gas (the MOS commodity payment or charge). The MOS provider can then choose to submit bids or offers for the gas it needs to replace or run down its MOS gas allocation on the gas day.

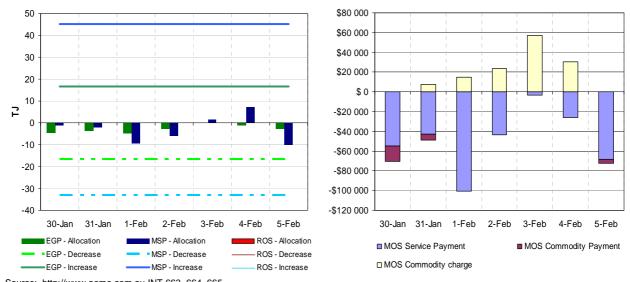
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² Deviations occur when the gas flowed on pipelines into hubs on a gas day differ from the modified market schedule, or when gas taken out of the hub is different to the schedule.

Figure S17a and S18a show quantities of MOS allocated on a daily basis compared to total MOS increase and decrease offers (from potential providers) on each pipeline at each hub. MOS allocations are shown by the columns in these figures; whereas total MOS increase and decrease offers on each pipeline are shown by horizontal lines (as indicated in the legend). Figures S17b and S18b show MOS service payments and MOS commodity payments or charges. Payments fall below the horizontal axis and charges are displayed above the axis.

Figure S17a: Sydney MOS allocations

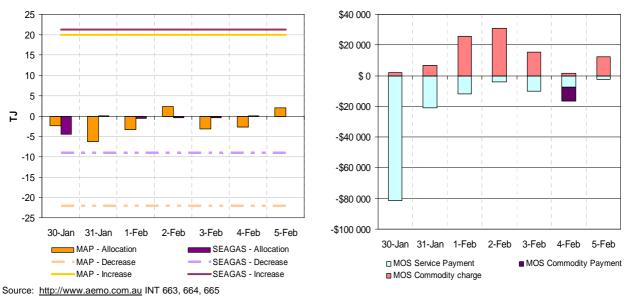
Figure S17b: Sydney MOS payments/charges



Source: http://www.aemo.com.au INT 663, 664, 665 EGP=Eastern Gas Pipeline, MSP=Moomba to Sydney Pipeline, ROS=Rosalind Park Production facility

Figure S18a: Adelaide MOS allocations

Figure S18b: Adelaide MOS payments/charges

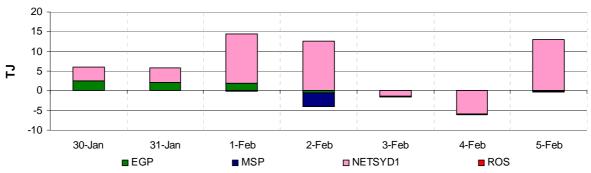


MAP=Moomba to Adelaide Pipeline, SEAGAS=SEA gas pipeline

Deviations

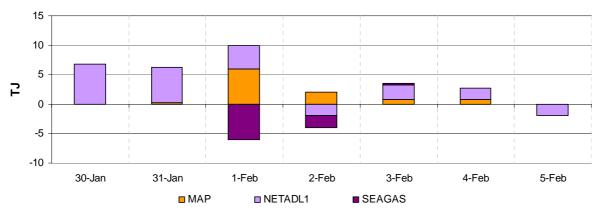
Deviations occur when the gas flowed on pipelines into hubs on a gas day differ from the modified market schedule, or when gas taken out of the hub is different to the schedule. The most likely reason for deviations is where participants incorrectly forecast the demand of customers within the hub. As discussed previously, figures S5 and S6 show allocated quantities versus scheduled. Where they differ, there is a deviation. Net deviations may lead to requirements for MOS services. Figures S19 and S20 show net deviations at the STTM hubs.

Figure S19: Net Deviations - Sydney Hub



Source: http://www.aemo.com.au INT652

Figure S20: Net Deviations - Adelaide Hub



Source: http://www.aemo.com.au INT652

Market Schedule Variations

When a shipper deviates from the ex ante schedule, it can submit a "market schedule variation" (MSV) to AEMO. The variation must be matched by an opposite variation from either another shipper or a user. Market schedule variations allow shippers to adjust their schedules in line with their pipeline allocations and so avoid deviation charges. A variation can include flows from the hub, which must also be matched with variation of flows to the hub.

Variations that cause a change in withdrawals at the hub attract a variation charge (but no deviation charge), which is designed to encourage more accurate day-ahead forecasting. The variation charge has a sliding scale such that the bigger the variation, the bigger the charge. However, variations that do not change the demand at the hub are exempt. Figures S21 and S22 show MSV quantities and charges at the STTM Hubs.

Figure S21: Average Daily Market Variations - Sydney Hub

	30 Jan – 5 Feb	23 Jan – 29 Jan	2010-11 Financial YTD*
Quantity (TJ)	5.19	1.46	3.99
Charges (\$)	275.63	27.94	923.89

* Financial Year to date figures exclude market trial data (year-to-date from 1 September 2010) Source: http://www.aemo.com.au INT663

Figure S22: Average Daily Market Variations - Adelaide Hub

	30 Jan – 5 Feb	23 Jan – 29 Jan	2010-11 Financial YTD*
Quantity (TJ)	1.21	0.03	0.84
Charges (\$)	61.47	0.00	20.75

* Financial Year to date figures exclude market trial data (year-to-date from 1 September 2010) Source: http://www.aemo.com.au INT663

APPENDIX

Figures A1 and A2 display the daily gas flows from each pipeline and production/storage facility in the National Gas Market over the current week. The nameplate capacity or MDQ (Maximum Daily Quantity) for each facility are also provided, along with the proportion of MDQ used on average over the current week and the year to date at each facility. Flow data not provided by bulletin board polling time is indicated by N/A.

Figure A1: Daily flows (TJ) for pipeline facilities

Demand zone and pipeline facility	Sun	Mon	Tue	Wed	Thu	Fri	Sat	MDQ (TJ)	YTD average capacity usage (%)	Current week average daily flows	Current YTD average daily flows*	Previous YTD average daily flows**
QLD												
Carpentaria Pipeline	91	91	72	63	38	50	66	117	80	67	94	86
QLD Gas Pipeline	115	114	110	109	114	121	121	142	77	115	109	70
Roma to Brisbane Pipeline	162	175	180	185	184	170	139	219	78	171	172	167
South West QLD Pipeline	129	143	154	168	186	167	163	181	73	158	133	144
NSW/ACT												
Eastern Gas Pipeline	204	227	232	238	211	219	192	268	80	217	213	200
Moomba to Sydney Pipeline	122	191	192	207	230	230	175	420	47	192	196	194
NSW-VIC Interconnect	48	49	55	47	56	43	52	92	13	50	12	-13
VIC												
Longford to Melbourne	417	459	470	383	428	415	422	1030	50	428	515	443
South West Pipeline	4	157	132	204	150	116	54	347	30	117	105	127
SA												
Moomba to Adelaide Pipeline	197	262	216	206	214	184	162	253	51	206	129	130
SEA Gas Pipeline	201	221	184	240	218	209	113	314	52	198	162	154
TAS	1											
Tasmanian Gas Pipeline#	44	51	49	45.8	45.8	47	38	129	42	325	54	37

^{*}Average daily estimated gas consumption measured from 1 July 2010 to the current week (inclusive)

Source: Natural Gas Market Bulletin Board http://www.gasbb.com.au

Notes: Operational ranges for each pipeline facility range from a minimum of 20 per cent to a maximum of 120 per cent of the respective MDQs. The exceptions are the South West Queensland Pipeline and the NSW-VIC Interconnect which have operational ranges 40 per cent to 120 per cent and 0 to 120 per cent of MDQ respectively.

^{**}Average daily estimated gas consumption measured from 1 July 2009 to the equivalent week in 2009-10 (inclusive)

^{*} Figures in red are derived from the average daily flows on the remaining days of the week. These figures replace incorrect data provided by the pipeline operator

Figure A2: Figure A2: Daily flows (TJ) for production / storage facilities compared to operational ranges and use of production/storage capacity

88 125 50 5 10	Roma (QLD) Berwyndale South Fairview Kenya Gas						(TJ)	average capacity usage* (%)	week average daily flows	YTD average daily flows*	YTD average daily flows**
125 50 5 10	South Fairview										
50 5 10		89	90	90	89	87	140	68	89	96	91
5 10	Kenya Gas	129	129	120	120	120	130	90	124	117	114
10	Plant	50	53	50	45	44	160	35	49	57	50
	Kincora	9	15	15	15	14	25	16	10	4	1
	Kogan North	10	10	10	10	10	12	78	10	9	8
7	Peat	6	11	11	11	11	15	63	10	9	8
9	Rolleston	10	8	10	8	5	30	35	8	10	11
30	Scotia	30	30	30	30	30	29	91	30	26	22
48	Spring Gully	49	49	48	47	48	69	71	48	49	44
48	Strathblane	49	49	48	47	48	69	71	48	49	44
29	Γaloona	30	29	29	29	29	42	71	29	30	27
4	Nallumbilla	4	4	4	3	3	20	38	4	8	11
12	rellowbank	11	11	12	11	11	30	40	11	12	14
79	Гalinga	80	80	80	79	79	90	66	79	60	0
302 24	Moomba SA/QLD) Moomba Gas Plant Ballera	311 18	325 2	339	317 0	305 0	430 150	63 11	312 9	273 16	275 8
	Eastern VIC)										
39	Orbost Gas Plant	14	0	25	39	39	100	28	28	28	15
51	Lang Lang Gas Plant	50	58	57	58	55	70	70	54	49	37
607	Longford Gas Plant	610	611	613	616	602	1145	62	610	709	639
23	NG Storage Dandenong	0	29	0	0	0	158	0	7	0	0
	Otway Basin (VIC)										
91	Minerva Gas Plant	91	91	91	81	55	84	77	83	64	74
0	Otway Gas Plant	0	0	0	0	0	205	57	0	116	128
266	ona Jnderground Gas Storage	289	338	279	222	126	440	21	228	94	86
	Minerva Gas Plant Otway Gas Plant ona Underground	0	0 0 266 289	0 0 0 266 289 338	0 0 0 0 266 289 338 279	0 0 0 0 0 266 289 338 279 222	0 0 0 0 0 0 0 266 289 338 279 222 126	0 0 0 0 0 0 205 266 289 338 279 222 126 440	0 0 0 0 0 0 205 57 266 289 338 279 222 126 440 21	0 0 0 0 0 0 205 57 0	0 0 0 0 0 0 0 205 57 0 116 266 289 338 279 222 126 440 21 228 94

Source: Natural Gas Market Bulletin Board http://www.gasbb.com.au

Notes: Operational ranges for each production and storage facility range from minimum of 0 per cent to a maximum of 120 per cent of the respective MDQs. The exception is the Longford Gas Plant which has a minimum operational range of 20 per cent to 120 per cent of its MDQ.

^{*}Average daily estimated gas consumption measured from 1 July 2010 to the current week (inclusive)

**Average daily estimated gas consumption measured from 1 July 2009 to the equivalent week in 2009-10 (inclusive)

Figure A3 provides the average minimum and maximum temperatures for each of the demand regions for the current week. The average temperatures for the previous week are also provided. (Note: only the demand regions where temperature is a driver of gas demand are included).

Figure A3: Average daily temperatures (°C) at each demand region

Average daily temperatures (°C)		QLD (Brisbane)	NSW (Sydney)	ACT (Canberra)	VIC (Melbourne)	SA (Adelaide)	TAS (Hobart)
30 Jan – 5 Feb	Average min.	20.7	21.7	15.8	15.5	17.7	12.2
	Average max.	30.3	28.8	31.8	25.3	31.8	22.4
23 Jan – 29 Jan	Average min.	20.8	20.8	14.4	15.9	16.7	13.0
	Average max.	31.0	27.4	29.5	25.7	29.3	21.5

Source: http://www.bom.gov.au/climate/dwo

Figure A4 shows the market prices at each of the scheduling intervals on each day during the current week. The imbalance weighted average prices for each gas day are also provided.

Figure A4: Daily Victorian gas market prices (\$/GJ) at each scheduling interval

30 Jan – 5 Feb			Daily Imbalance Weighted Average			
	6am	10am	2pm	6pm	10pm	Price
Sun	2.83	3.80	3.89	4.00	3.81	2.92
Mon	3.90	4.00	4.00	3.40	4.00	3.89
Tue	2.83	3.61	3.61	2.99	2.99	2.91
Wed	4.55	6.01	5.99	6.01	5.99	4.71
Thu	2.00	3.80	2.00	2.00	2.00	2.15
Fri	3.77	3.77	3.49	2.99	2.46	3.73
Sat	2.45	2.07	3.57	2.53	1.99	2.43

Source: http://www.aemo.com.au (INT 041).

Figure A5 compares the market participants and market operator demand forecasts and each of the scheduling intervals on each gas day during the current week. Total actual demand for each gas day is also provided, along with the total demand override (if any) from AEMO.

Figure A5: Daily demand forecasts (TJ) and daily demand overrides (TJ)

Gas Day	Demand Forecasts (TJ)	Schedule					Total
		1	2	3	4	5	Demand Override (TJ)
30-Jan	MP:	385	385	385	384	384	`O´
	AEMO:	368	368	370	360	364	
	MP as % of AEMO	104	105	104	107	106	
31-Jan	MP:	542	562	565	574	574	0
	AEMO:	527	551	559	593	559	-
	MP as % of AEMO	103	102	101	97	103	
1-Feb	MP:	553	560	571	576	576	0
	AEMO:	551	547	566	577	564	
	MP as % of AEMO	100	102	101	100	102	
2-Feb	MP:	566	565	566	579	579	0
	AEMO:	535	576	550	567	561	
	MP as % of AEMO	106	98	103	102	103	
3-Feb	MP:	518	543	542	545	545	0
	AEMO:	504	531	523	514	514	
	MP as % of AEMO	103	102	104	106	106	
4-Feb	MP:	493	550	550	550	550	0
	AEMO:	476	524	527	506	500	
	MP as % of AEMO	104	105	104	109	110	
5-Feb	MP:	387	443	446	444	444	0
	AEMO:	385	443	464	460	432	
	MP as % of AEMO	100	100	96	97	103	

Source: http://www.aemo.com.au (INT 108, INT 126, INT 153)