

22 August – 28 August 2010

Preface

As part of its monitoring roles for the National Gas Market Bulletin Board (Bulletin Board) and 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.

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 aer inquiry@ aer.gov.au, with the subject title 'Comments on weekly gas report'.

Summary

National Gas Market Bulletin Board

There were no instances of missing flow data on the Bulletin Board this week.

Figure 4 shows changes in gas demand and production and pipeline flows compared to the previous week. Total average daily demand for gas decreased by 14 TJ (1 per cent) compared to the previous week. Demand increased in the Queensland regions by 10 TJ (2 per cent), while demand in South Australia increased by 7 TJ (2 per cent). Demand in Victoria and NSW/ACT decreased this week by 15 TJ in each region (2 per cent and 3 per cent respectively), with demand in Tasmania relatively unchanged.

Total average daily Gas Powered Generation (GPG) gas usage fell by 18 TJ (4 per cent) compared to the previous week. There was a 30 TJ (36 per cent) reduction in the NSW/ACT region, with small increases in most other states.

Average daily production volumes fell by 20 TJ (1 per cent) compared to the previous week. In Victoria, production in the Otway Basin increased by 25 TJ (8 per cent) and a decrease of 52 TJ (5 per cent) occurred in the East of the state due to reduced injections at Longford and Lang Lang. This resulted in flow reductions of 29 TJ on both the Longford to Melbourne and Eastern Gas Pipelines. An additional 15 TJ (6 per cent) flowed on the Moomba to Sydney Pipeline, while flows on the South West Pipeline into Melbourne increased by 14 TJ (8 per cent), counteracting the reduced supply from Eastern Victoria. There were minor changes to production volumes in the northern production zones, with a total increase of 7 TJ at Moomba, Ballera and the Roma production regions.

Victorian Gas Market

In line with the reduced demand in Victoria, average gas injections fell by 16 TJ (2 per cent) compared to the previous week (see Figure V3). The average imbalance price decreased from \$3.08/GJ the previous week to \$2.93/GJ (see Figure V2). AEMO issued demand overrides of -6 TJ on Tuesday, 9 TJ on Thursday and -3 TJ on Saturday (see Figure A5). Supply Point Constraints (SDPCs) were applied to injections at Longford from 25 August to 27 August, and at Bass Gas on 27 and 28 August. A Directional Flow Point Constraint (DFPC) was also applied to injections and withdrawals at the SEA Gas facility on the 27 August gas day, coinciding with an increase in the number of participants rebidding at the facility (see Figure V5).

Short Term Trading Market (STTM) – Market Operator Service (MOS) Stack

The STTM commences on 1 September 2010 in the Adelaide and Sydney gas hubs. The AER will commence reporting on STTM outcomes in the next weekly gas market analysis.

In preparation for the commencement of the STTM, AEMO published MOS stacks on 25 August 2010. MOS is a daily mechanism for allocating balancing gas provided by pipelines to maintain pressure at receipt points. This balancing gas is the difference between what was scheduled by a pipeline operator (pipeline schedule) and the actual quantities of gas that flowed on a pipeline on the day. MOS offers are made by STTM participants who have contracts with pipeline facilities to “park” or “loan” gas.

AEMO publishes the estimated quantities of MOS for each pipeline. There is a requirement for both decline and incline MOS for each pipeline. The requirements are based on historical data and indicate a maximum likely amount of MOS required on any of these pipelines for a day. These estimates are shown by the red line in figures S1 and S2. Offers made by Participants for MOS are shown within price bands (the maximum price for MOS is \$50/GJ).

Figure S1 – MOS Offers and AEMO MOS Estimate – Adelaide

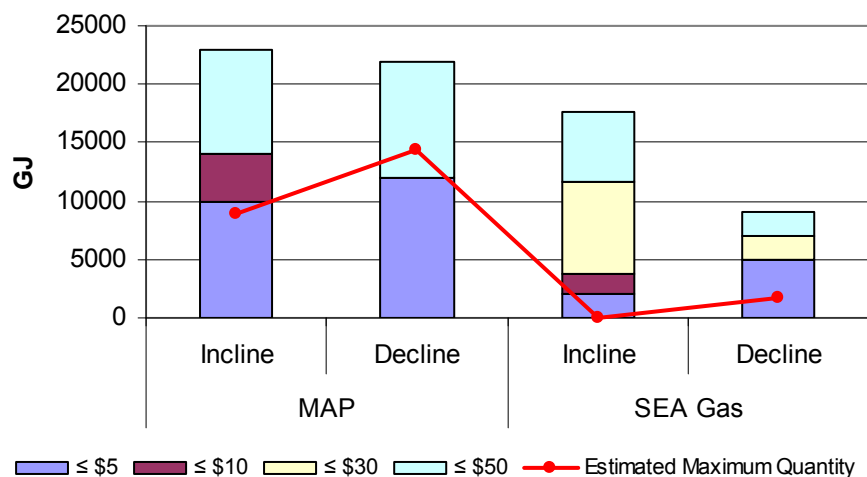
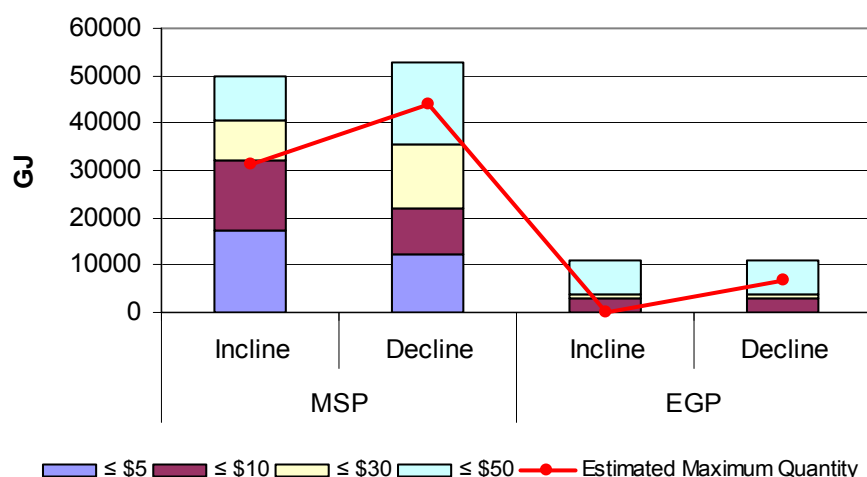


Figure S2 – MOS Offers and AEMO MOS Estimate - Sydney



The figures show MOS estimates (and offers) are much higher on the MSP for Sydney and on the MAP for Adelaide. These pipelines are “pressure controlled” and can absorb larger swings in gas flows and hence provide larger MOS.

Part A: National Gas Market Bulletin Board

Overview of pipeline and production flows

Figure 1 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 1: Average daily pipeline flows (TJ) into each demand region

Average daily flows	NSW	ACT	VIC	SA	TAS	Brisbane	QLD	
							Mt Isa	Gladstone
22 – 28 August	419	46	950	309	48	192	97	119
Financial Year-to-date 2010-11*	463	49	945	322	50	187	92	97
Financial Year-to-date 2009-10**	451	44	869	284	24	142	90	67

*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 (inclusive)

Source: National Gas Market Bulletin Board <http://www.gasbb.com.au>

Figure 2 provides the average daily amount of gas used for GPG (gas-powered generators) in each state.

Figure 2: Average daily gas (TJ) used by gas-powered generators in each state

Average daily gas for GPG usage [^]	NSW	VIC	SA	TAS	QLD
22 – 28 August	54	10	160	34	164
Financial Year-to-date 2010-11*	83	22	180	34	159
Financial Year-to-date 2009-10**	89	49	145	10	97

[^]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'

*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 (inclusive)

Source: <http://www.aemo.com.au>

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 3 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 of the Appendix.)

Figure 3: Daily average production flows (TJ) for each production zone

Average daily flows	Roma (QLD)	Eastern Victoria	Otway Basin (VIC)	Moomba (SA/QLD)
22 – 28 August	589	1017	355	364
Financial Year-to-date 2010-11*	567	1060	359	369
Financial Year-to-date 2009-10**	410	877	360	370

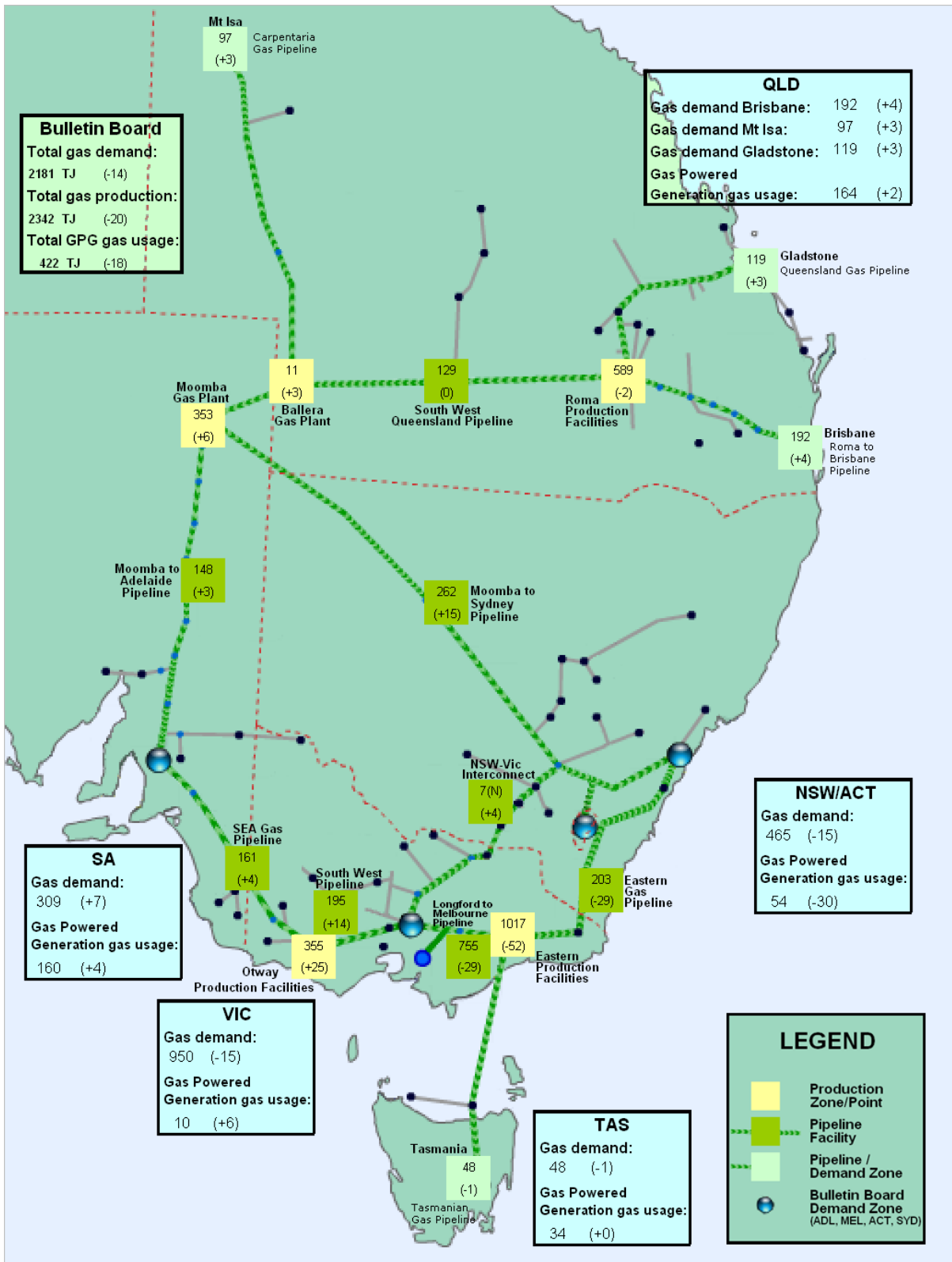
*Average daily estimated gas consumption measured from 1 July 2010 to the current week (inclusive)

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

Source: National Gas Market Bulletin Board <http://www.gasbb.com.au>

Figure 4 shows the average daily pipeline flows, production, demand and GPG usage in each region (with changes from the previous week shown in brackets).

**Figure 4: Gas production/consumption and pipeline flows (TJ)
(changes from last week are shown in brackets)**

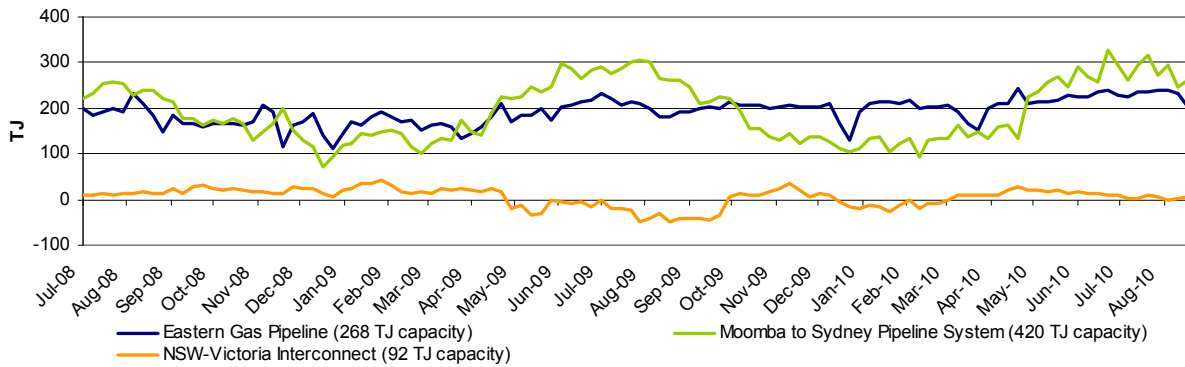


Source: Natural Gas Market Bulletin Board <http://www.gasbb.com.au>
 Notes: Direction of aggregate daily flows along the NSW-Vic Interconnect indicated on map by S (South) or N (North).
 Numbers in brackets indicate a change in average daily flow from the previous week.

Gas flows into demand regions

Figures 5 to 7 provide the average daily flows into each of the demand regions served by multiple pipelines and supply sources.

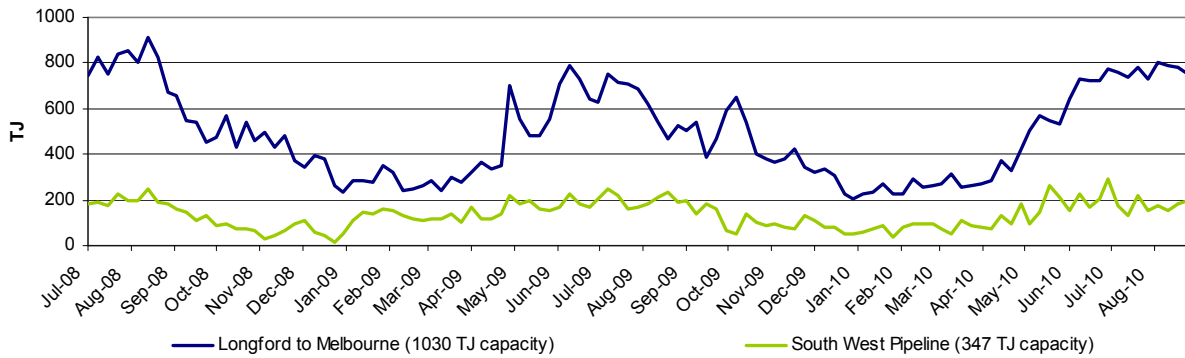
Figure 5: Average daily flows (TJ) into NSW/ACT demand region



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

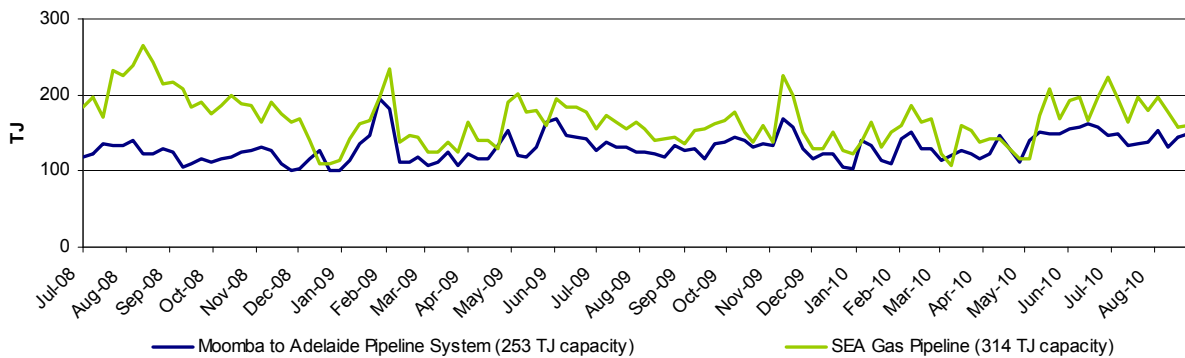
Notes: Negative flows on the NSW-Victoria Interconnect represent flows out of NSW into VIC.

Figure 6: Average daily flows (TJ) into VIC demand region



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

Figure 7: 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 Principal Transmission System (VPTS). 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 below indicates where a change has occurred from the previous week.

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

Market Participant	Participant type	No. of injection / withdrawal bid points	Injection bids in the VPTS							Withdrawal bids in the VPTS				
			Bass Gas	Culcairn	IONA	LNG	Longford	SEA Gas	VicHub	Otway	Culcairn	IONA	SEA Gas	VicHub
AETV Power	Trader	2					S		S					S
AGL (Qld)	Retailer	1				NS								
AGL	Retailer	4		NS	S	NS	S				NS	NS		
Aurora Energy	Retailer	1					S							
Aust. Power & Gas	Retailer	3			S	NS	S					S		
Coogee Energy	Transmission Customer	1					S							
Country Energy	Transmission Customer	1									S			
Energy Australia	Retailer	3			S		S		NS					NS
International Power	Transmission Customer	1										S		
Lumo Energy	Retailer	5		NS	S	NS		S	S					
Lumo Energy	Trader	2			S				NS			S		NS
Origin (Vic)	Retailer	6	S	NS	S	NS	S	S			NS	S		
Origin (Uranquinty)	Trader	1					S							
Red Energy	Retailer	1					S							
Santos	Retailer	2						S	S					
Simply Energy	Retailer	4			S	NS	S	NS						
TRU Energy	Retailer	4			S	NS	S		S			NS		NS
Visy Paper	Distribution Customer	2					S				S			

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

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

Notes: Comparison is approximate since data represents whether bids were under or over the scheduled market clearing price at 6am. 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.

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. Daily imbalance prices for each day during the current week are also noted.

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

	22 – 28 August	15 – 21 August	2010-11 Financial YTD*	2009-10 Financial YTD**
Average daily price	2.93	3.08	2.86	1.68

22 August – 28 August	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Daily price	3.14	3.06	1.05	3.22	3.34	3.49	3.21

*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 (inclusive)

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

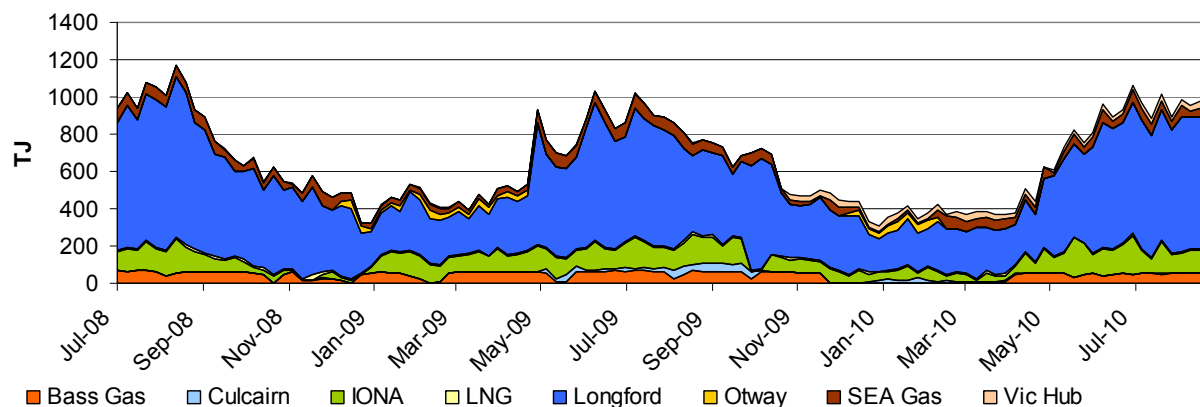
Notes: The daily average market price is a volume weighted imbalance price taking account of trading amounts at five times through the gas day — 6am, 10am, 2pm, 6pm and 10pm.

System Injections

Figure V3 notes the average daily injections into the VPTS for the current 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 VPTS

Injection Point:	22 – 28 August	15 – 21 August	2010-11 Financial YTD*	2009-10 Financial YTD**
Culcairn	0	1	2	29
Longford	682	704	690	579
LNG	8	9	8	9
IONA	139	128	124	135
VicHub	35	33	31	1
SEAGas	51	50	51	70
Bass Gas	43	51	50	57
Otway	0	0	0	0
TOTAL	958	973	956	879



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

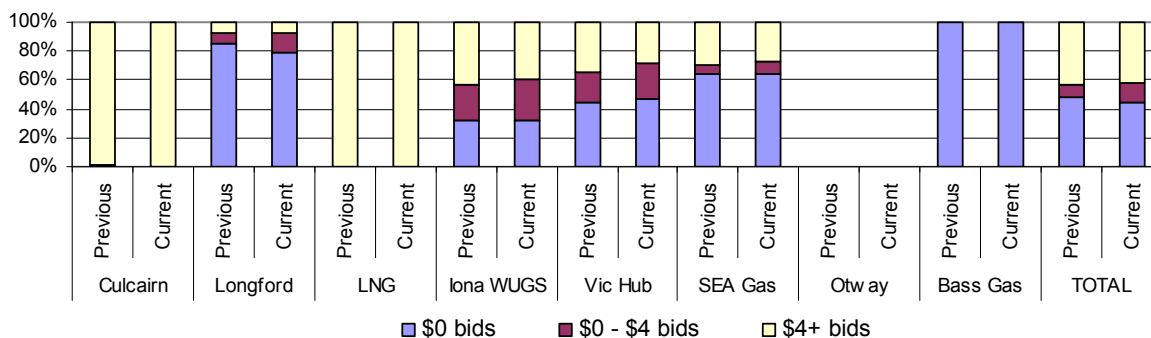
**Average daily estimated gas consumption measured from 1 July 2009 to the equivalent week in 2009 (inclusive)

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 VPTS 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			Origin				
Longford	AGL TRU	TRU	TRU	AGL TRU	AGL TRU	AGL TRU	AGL TRU
LNG				Origin APG		Origin	
Iona		AGL TRU Lumo	AGL TRU APG	Origin TRU APG Lumo	AGL TRU APG Lumo	AGL Origin TRU Lumo	Origin TRU APG
VicHub	AETV	AETV	AETV	AETV TRU Lumo	AETV	AETV Lumo	AETV
SEAGas	Simply		Simply	Simply		Origin Santos Simply Lumo	
Bass Gas						Origin	Origin

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) |

System withdrawals

Figure V6 notes the average daily gas usage on the VPTS for this week, compared with the 2009-10 financial year-to-date daily average, as well as the 2008-09 equivalent.

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

System withdrawal zone:	22 – 28 August	15 – 21 August	2010-11 Financial YTD*	2009-10 Financial YTD**
Ballarat	46	48	46	41
Geelong[^]	107	109	108	97
Gippsland	58	60	58	57
Melbourne	658	679	661	611
Northern	85	84	86	74
TOTAL	955	979	959	881

[^]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 (inclusive)

Source: <http://www.aemo.com.au> (INT 150).

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 capacity

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	98	98	96	97	96	95	100	117	79	97	92	90
QLD Gas Pipeline	118	117	121	123	120	120	118	142	68	119	97	67
Roma to Brisbane Pipeline	167	198	205	203	206	198	171	219	85	192	187	142
South West QLD Pipeline	108	122	130	146	145	130	124	181	78	129	140	158
NSW/ACT												
Eastern Gas Pipeline	217	245	237	217	178	174	155	268	86	203	230	207
Moomba to Sydney Pipeline	206	268	275	287	293	276	230	420	67	262	283	288
NSW-VIC Interconnect [^]	7	11	0	3	6	11	8	92	5	7	5	-28
VIC												
Longford to Melbourne	667	753	758	835	784	769	717	1030	74	755	767	633
South West Pipeline	117	143	189	310	232	243	132	347	51	195	177	207
SA												
Moomba to Adelaide Pipeline	127	143	157	163	155	150	143	253	56	148	141	128
SEA Gas Pipeline	114	178	174	168	173	161	159	314	58	161	181	156
TAS												
Tasmanian Gas Pipeline	46	50	47	49	50	48	47	129	39	48	50	24

*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 (inclusive)

[^]Negative figure represents a reverse flow of gas along the pipeline

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

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

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

Production zone and production / storage 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**
Roma (QLD)												
Berwyndale South	108	108	108	107	107	107	104	140	70	107	98	80
Fairview	130	129	129	132	131	129	129	130	96	130	124	107
Kenya Gas Plant	69	69	69	69	68	69	66	160	38	68	60	23
Kincora	0	0	0	10	10	10	12	25	19	6	5	1
Kogan North	10	10	9	8	9	10	10	12	79	9	10	6
Peat	7	9	11	11	9	9	11	15	68	10	10	11
Rolleston	11	10	10	11	11	11	10	30	38	11	11	11
Scotia	29	29	29	29	29	29	0	29	95	25	28	12
Spring Gully	54	55	55	54	55	55	55	60	89	55	53	52
Strathblane	54	55	55	54	55	55	55	60	89	55	53	52
Taloona	32	34	33	33	33	33	33	36	90	33	32	31
Wallumbilla	10	10	10	10	10	10	10	20	47	10	9	8
Yellowbank	13	13	13	13	13	13	13	30	43	13	13	15
Talinga	34	68	68	65	65	55	54	81	74	58	60	
Moomba (SA/QLD)												
Moomba Gas Plant	313	348	344	366	366	382	354	430	84	353	362	368
Ballera	24	12	9	0	2	9	19	150	4	11	7	1
Eastern (VIC)												
Orbost Gas Plant	0	0	0	0	0	0	0	100	0	0	0	0
Lang Lang Gas Plant	51	50	50	49	45	29	27	70	71	43	50	55
Longford Gas Plant	876	935	1036	1070	954	979	971	1145	88	974	1010	821
LNG Storage Dandenong	0	0	0	0	0	0	0	158	0	0	0	0
Otway Basin (VIC)												
Minerva Gas Plant	68	83	73	68	94	94	94	94	90	82	84	79
Otway Gas Plant	104	143	146	151	138	108	126	206	68	131	139	145
Iona Underground Gas Storage	85	96	138	223	166	204	84	440	31	142	135	135

*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 (inclusive)

Notes: Operational ranges for each production and storage facility range from minimum of 0% 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% of its MDQ.

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)
22 – 28 August	Average min.	11.5	10.3	1.9	6.9	8.2	5.8
	Average max.	21.3	17.8	11.7	14.9	15.0	13.9
15 – 21 August	Average min.	10.2	9.8	2.6	8.0	8.8	5.0
	Average max.	23.2	19.6	12.4	14.7	15.5	13.5

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

22 – 28 August	Scheduling Interval					Daily Imbalance Weighted Average Price
	6am	10am	2pm	6pm	10pm	
Sun	3.21	3.19	1.88	0.60	1.26	3.14
Mon	3.19	3.21	1.01	0.15	0.15	3.06
Tue	1.03	0.40	0.16	2.00	3.20	1.05
Wed	3.20	3.48	3.49	3.49	3.49	3.22
Thu	3.50	1.95	1.50	1.50	3.14	3.34
Fri	3.68	3.60	1.80	0.15	1.56	3.49
Sat	3.28	2.80	1.80	1.65	0.97	3.21

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 Demand Override (TJ)
		1	2	3	4	5	
22-Aug	MP:	826	816	815	815	816	0
	AEMO:	793	802	791	782	779	
	MP as % of AEMO	104	102	103	104	105	
23-Aug	MP:	931	939	931	926	929	0
	AEMO:	897	894	880	878	875	
	MP as % of AEMO	104	105	106	105	106	
24-Aug	MP:	968	948	974	979	979	-6
	AEMO:	972	902	911	941	949	
	MP as % of AEMO	100	105	107	104	103	
25-Aug	MP:	1044	1082	1106	1108	1106	0
	AEMO:	1053	1064	1128	1126	1129	
	MP as % of AEMO	99	102	98	98	98	
26-Aug	MP:	1116	1073	1073	1054	1055	9
	AEMO:	1116	1078	1074	1039	1070	
	MP as % of AEMO	100	99	100	101	99	
27-Aug	MP:	992	992	1002	998	998	0
	AEMO:	972	972	978	977	968	
	MP as % of AEMO	102	102	102	102	103	
28-Aug	MP:	869	868	867	864	869	-3
	AEMO:	850	858	860	851	839	
	MP as % of AEMO	102	101	101	102	104	

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