

20 June – 26 June 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, and headed 'Comments on weekly gas report'.

Summary

National Gas Market Bulletin Board

For the second week in a row, 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 increased by 105 TJ (5 per cent) compared to the previous week. Significant reductions were recorded in Victoria 37 TJ (4 per cent), South Australia 27 TJ (8 per cent) and Brisbane 26 TJ (16 per cent). All other regions recorded minor variations.

Total average daily Gas Powered Generation (GPG) gas usage increased by 54 TJ (12 per cent) compared to the previous week. While GPG gas usage decreased by 8 TJ in Queensland and remained steady in Tasmania, an increase in the usage of gas for GPG was exhibited by the remaining regions. Significant increases were recorded in South Australia (35 TJ or 19 per cent) and Victoria (17 TJ or 636 per cent).

Average daily production volumes rose by 66 TJ (3 per cent) compared to the previous week. Production volumes at the Otway Basin increased by 49 TJ (14 per cent) due to increased demand for GPG in Victoria and South Australia, with average flows for the week increasing on the South West Pipeline into Melbourne (36 TJ or 22 per cent) and the SEA Gas Pipeline into Adelaide (32 TJ or 19 per cent).

Victorian Gas Market

In line with the increase in demand in Victoria, average gas injections rose by 36 TJ (4 per cent) compared to the previous week (See Figure V3). The average imbalance price decreased from \$3/GJ the previous week to \$2.11/GJ, influenced by the low prices on Sunday, Thursday and Friday (see Figure V2). This coincided with an increase in low priced gas offered to the market compared to the previous week (see Figure V4).

AEMO issued demand overrides on Monday 21 June (19 TJ), Tuesday 22 June (2 TJ) and Saturday 26 June (-20 TJ) (see figure A5).

Demand Point Constraints (SDPCs) were applied at two facilities this week. SEA Gas experienced problems on Sunday 20 June, with a confirmation of 0 TJ withdrawal (compared

to the schedule of 24 TJ). Withdrawals at Culcairn were also constrained on Tuesday 22 June and Wednesday 23 June.

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	QLD		
						Brisbane	Mt Isa	Gladstone
20 June – 26 June	458	39	924	354	45	185	94	81
Financial Year-to-date 2009-10*	374	21	579	287	39	168	86	71
Financial Year-to-date 2008-09**	335	21	628	302	32	170	83	67

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

**Average daily estimated gas consumption measured from 1 July 2008 to the equivalent week in 2008 (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
20 June – 26 June	90	19	217	28	158
Financial Year-to-date 2009-10*	85	37	171	24	162
Financial Year-to-date 2008-09**	44	63	184	22	117

^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 2009 to the current week (inclusive)

**Average daily estimated gas consumption measured from 1 July 2008 to the equivalent week in 2008 (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)
20 June – 26 June	553	1000	394	376
Financial Year-to-date 2009-10*	473	688	288	283
Financial Year-to-date 2008-09**	352	718	318	311

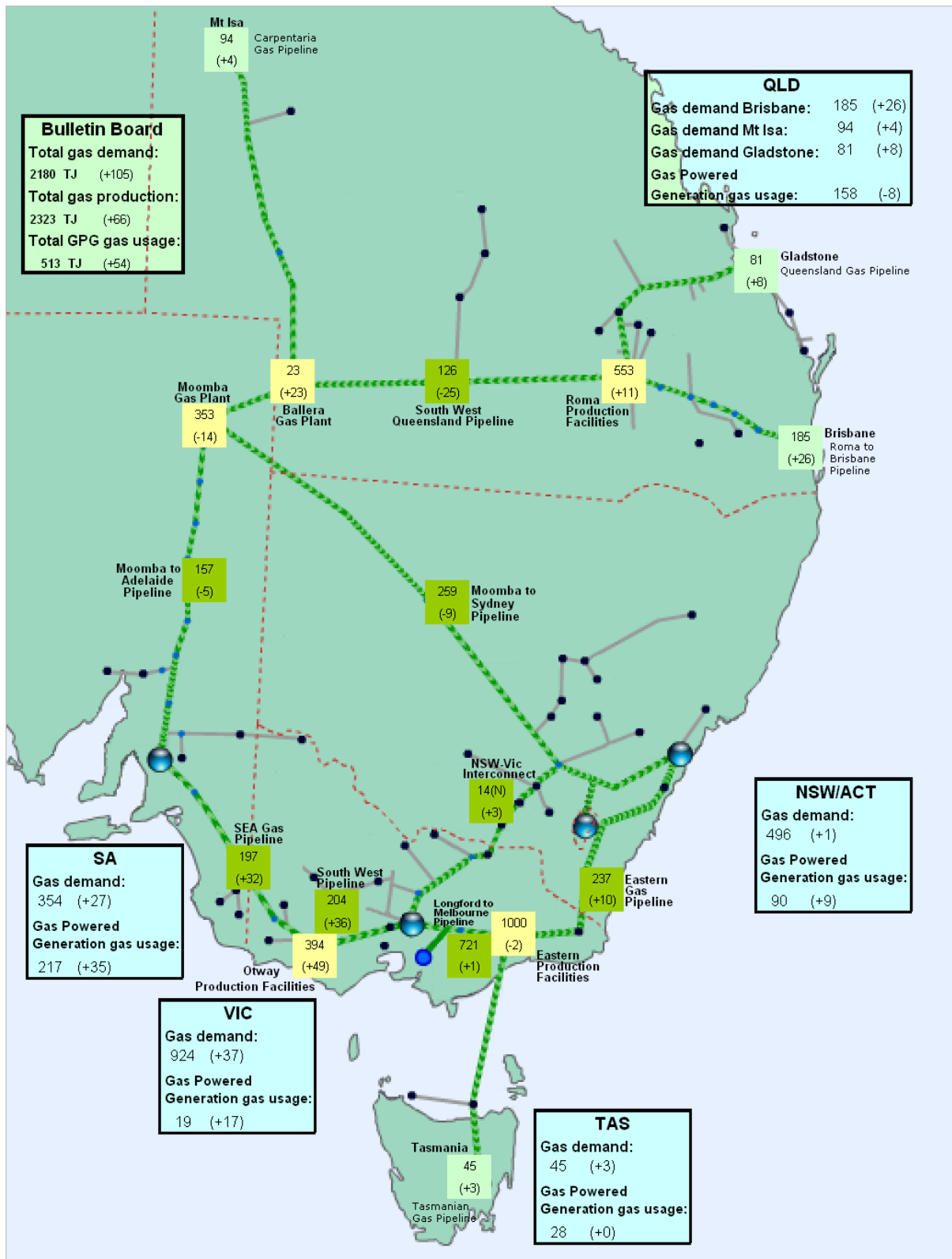
*Average daily estimated gas consumption measured from 1 July 2009 to the current week (inclusive)

**Average daily estimated gas consumption measured from 1 July 2008 to the equivalent week in 2008 (inclusive)

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

Figure 4 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.

Figure 4: Changes in gas demand and production and pipeline flows (TJ)



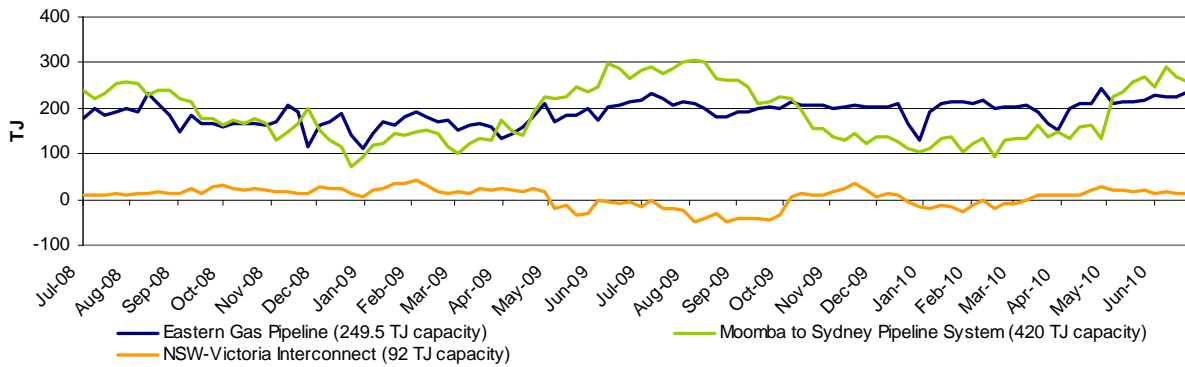
Source: Natural Gas Market Bulletin Board <http://www.gasbb.com.au>

Notes: Direction of aggregate daily flows along the NSW-Vic Interconnect indicated on map by S (South) or N (North).

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.

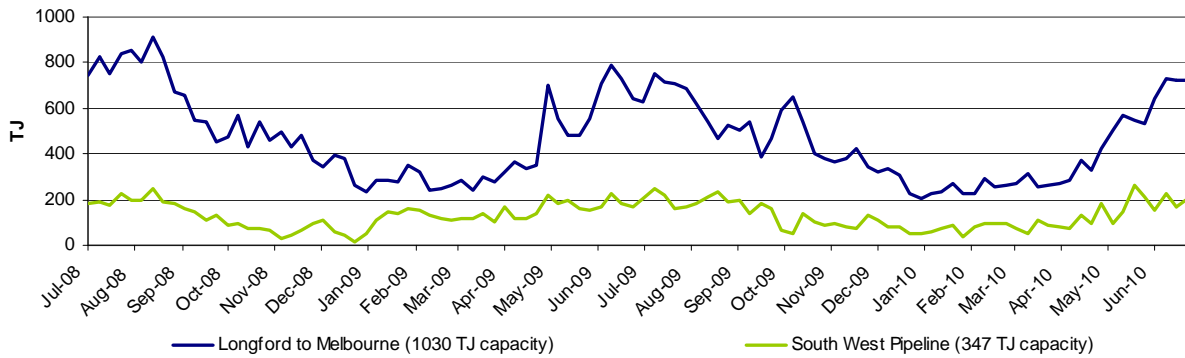
Figure 5: Average daily flows (TJ) into NSW/ACT demand region



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

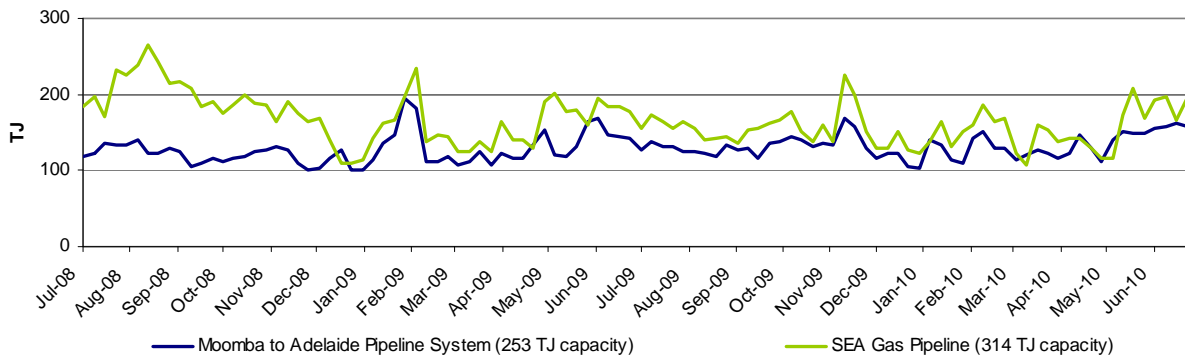
Notes: Negative flows on the NSW-Victoria Interconnect represent flows out of NSW into VIC.

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 (6am) 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	NS	NS	S				NS	NS		
Aust. Power & Gas	Retailer	3			S	NS	S					S		
Coogee Energy	Transmission Customer	1					S							
Country Energy	Transmission Customer	1		*S							S			
Energy Australia	Retailer	3			S		S		NS					S
International Power	Transmission Customer	1										S		
Origin (Vic)	Retailer	6	S	NS	S	NS	S	S			S	S		
Origin (Uranquinty)	Trader	1					S							
Red Energy	Retailer	1					S							
Santos	Retailer	3						S						
Simply Energy	Retailer	4			S	NS	S	NS						
TRU Energy	Retailer	4			S	NS	S					S		NS
Victoria Electricity	Trader	2			S				NS			S		S
Victoria Electricity	Retailer	5		NS	S	NS		S	S		S			
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 2009-10 financial year-to-date average and the 2008-09 financial year-to-date equivalent. Daily imbalance prices for each day during the current week are also noted.

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

	20 June – 26 June	13 June – 19 June	2009-10 Financial YTD*	2008-09 Financial YTD**
Average daily price	2.11	3.00	1.83	2.98

20 June – 26 June	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Daily price	0.27	3.67	3.55	3.48	0.34	0.34	3.15

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

**Average daily estimated gas consumption measured from 1 July 2008 to the equivalent week in 2008 (inclusive)

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

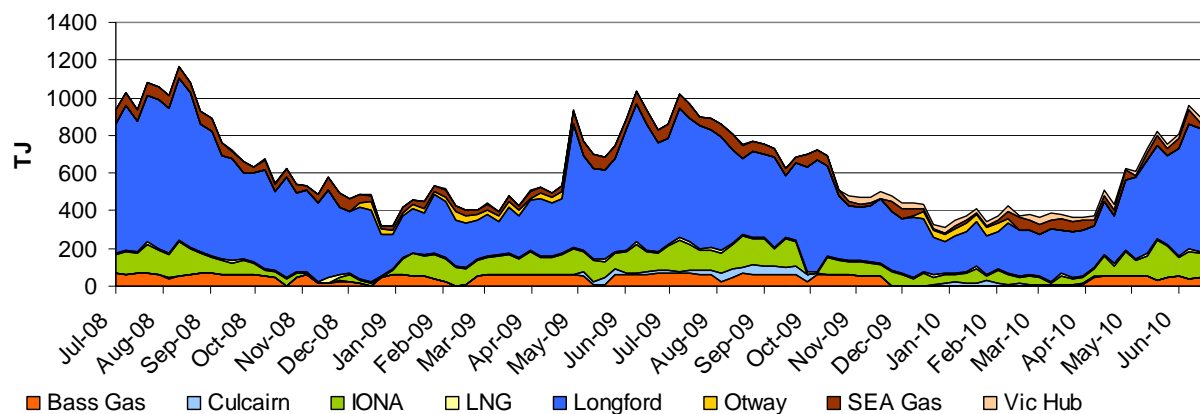
Notes: The daily average market price is a volume weighted imbalance price taking account of trading amounts at five times through the gas day — 6am, 10am, 2pm, 6pm and 10pm.

System Injections

Figure V3 notes the average daily injections into the VPTS for the current week, compared with the 2009-10 and 2008-09 equivalent financial year-to-date daily averages.

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

Injection Point:	20 June – 26 June	13 June – 19 June	2009-10 Financial YTD*	2008-09 Financial YTD**
Culcairn	0	0	13	2.9
Longford	647	650	386	455
LNG	6	9	8	9
IONA	157	128	85	84
VicHub	26.4	24.4	18.6	1.4
SEAGas	43	37	42	48
Bass Gas	51	48	34	48
Otway	0	0	7	11
TOTAL	931	896	594	659



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

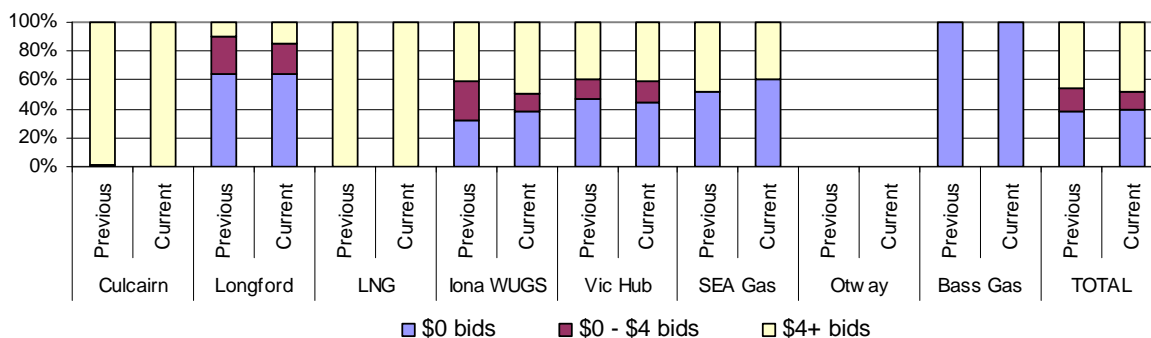
**Average daily estimated gas consumption measured from 1 July 2008 to the equivalent week in 2008 (inclusive)

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			CE				
Longford	AGL TRU	AGL TRU	AGL TRU	AGL TRU	AGL TRU	AGL TRU	AGL TRU
LNG			Origin				
Iona		Origin TRU APG	Origin TRU APG Vic Elec	TRU APG	TRU APG	TRU APG	TRU APG
VicHub	AETV	AETV	AETV	AETV	AETV	AETV	AETV
SEAGas		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 | Vic Elec = Victoria Electricity | CE = Country Energy

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:	20 June – 26 June	13 June – 19 June	2009-10 Financial YTD*	2008-09 Financial YTD**
Ballarat	44	44	23	24
Geelong^	107	104	81	85
Gippsland	64	53	45	58
Melbourne	633	613	388	426
Northern	87	87	57	67
TOTAL	936	901	595	660

^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 2009 to the current week (inclusive)

**Average daily estimated gas consumption measured from 1 July 2008 to the equivalent week in 2008 (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	96	95	93	96	96	94	90	117	74	94	86	83
QLD Gas Pipeline	63	65	85	83	84	84	84	79	90	81	71	67
Roma to Brisbane Pipeline	156	188	195	198	200	192	167	219	77	185	168	170
South West QLD Pipeline	137	161	155	119	113	123	76	181	76	126	138	92
NSW/ACT												
Eastern Gas Pipeline	222	251	241	235	233	232	230	250	82	237	204	175
Moomba to Sydney Pipeline	210	284	294	289	269	244	225	420	46	259	191	181
NSW-VIC Interconnect [^]	11	16	8	14	22	25	4	92	-4	14	-4	14
VIC												
Longford to Melbourne	649	814	797	705	688	621	771	1030	42	721	437	492
South West Pipeline	94	272	256	264	141	232	167	347	37	204	129	133
SA												
Moomba to Adelaide Pipeline	139	180	162	159	153	159	146	253	52	157	132	126
SEA Gas Pipeline	157	208	217	207	174	196	223	314	49	197	155	175
TAS												
Tasmanian Gas Pipeline	34	45	31	41	51	51	49	129	30	45	39	32

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

**Average daily estimated gas consumption measured from 1 July 2008 to the equivalent week in 2008 (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	97	95	100	103	106	106	106	140	66	102	93	78
Fairview	127	128	128	114	116	123	84	130	87	117	113	76
Kenya Gas Plant	52	58	68	63	69	70	66	160	35	64	56	
Kincora	8	0	0	12	0	0	0	25	7	3	2	4
Kogan North	11	11	11	11	11	11	10	12	73	11	9	11
Peat	6	6	10	10	6	11	11	15	58	9	9	11
Rolleston	11	11	11	12	12	11	12	30	38	11	11	11
Scotia	29	29	29	29	29	29	29	29	80	29	23	22
Spring Gully	47	52	53	53	50	51	44	60	72	50	43	58
Strathblane	47	52	53	53	50	51	44	60	72	50	43	49
Talooka	28	32	32	32	30	31	27	36	73	30	26	5
Wallumbilla	11	11	11	10	10	11	11	20	51	10	10	12
Yellowbank	14	14	14	13	13	13	13	30	42	13	13	14
Talinga	52	66	57	51	51	53	42	75	29	53	22	
Moomba (SA/QLD)												
Moomba Gas Plant	300	384	384	373	360	347	323	430	63	353	271	280
Ballera	15	0	0	18	37	26	64	150	8	23	12	31
Eastern (VIC)												
Orbost Gas Plant	0	0	0	0	0	0	0	100	17	0	17	0
Lang Lang Gas Plant	52	51	52	52	51	52	51	70	48	52	34	47
Longford Gas Plant	829	1059	1041	933	949	883	948	1145	56	949	637	670
LNG Storage Dandenong	0	0	0	0	0	0	0	158	0	0	0	1
Otway Basin (VIC)												
Minerva Gas Plant	73	94	94	88	94	94	94	94	76	90	72	87
Otway Gas Plant	81	142	137	164	170	144	151	206	61	141	126	142
Iona Underground Gas Storage	90	217	224	228	94	185	103	440	21	163	91	89

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

**Average daily estimated gas consumption measured from 1 July 2008 to the equivalent week in 2008 (inclusive)

^Commissioned as a Bulletin Board facility from 6 July 2009 (Facility began reporting flows from 7 July 2009)

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)
20 June – 26 June	Average min.	11.3	11.6	3.4	7.8	9.3	5.2
	Average max.	22.0	17.8	14.0	15.4	16.7	14.0
13 June – 19 June	Average min.	12.6	8.5	-0.5	7.1	6.8	4.4
	Average max.	21.7	18.5	13.1	15.1	15.4	13.8

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

20 June – 26 June	Scheduling Interval					Daily Imbalance Weighted Average Price
	6am	10am	2pm	6pm	10pm	
Sun	0.22	0.08	1.80	3.41	3.61	0.27
Mon	3.64	3.85	4.00	3.78	4.00	3.67
Tue	3.51	3.85	3.85	3.99	4.09	3.55
Wed	3.46	3.50	3.85	3.64	3.85	3.48
Thu	0.29	3.50	0.29	1.00	3.20	0.34
Fri	0.30	0.32	1.00	2.50	1.00	0.34
Sat	3.20	2.70	3.45	3.20	0.23	3.15

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	
20-Jun	MP:	746	733	745	746	745	0
	AEMO:	758	745	740	736	745	
	MP as % of AEMO	98	98	101	101	100	
21-Jun	MP:	904	938	953	956	971	19
	AEMO:	984	955	1031	1023	1038	
	MP as % of AEMO	92	98	92	93	94	
22-Jun	MP:	937	946	947	954	952	2
	AEMO:	977	978	1014	1028	1037	
	MP as % of AEMO	96	97	93	93	92	
23-Jun	MP:	903	905	912	905	904	0
	AEMO:	912	922	945	955	944	
	MP as % of AEMO	99	98	96	95	96	
24-Jun	MP:	808	808	805	804	804	0
	AEMO:	828	872	844	827	792	
	MP as % of AEMO	98	93	95	97	102	
25-Jun	MP:	841	848	852	864	864	0
	AEMO:	851	871	870	856	840	
	MP as % of AEMO	99	97	98	101	103	
26-Jun	MP:	966	979	980	976	956	-20
	AEMO:	926	939	966	944	918	
	MP as % of AEMO	104	104	101	103	104	

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