

13 June – 19 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

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 118 TJ (5 per cent) compared to the previous week. Significant reductions were recorded in Victoria 62 TJ (7 per cent) South Australia 28 TJ (8 per cent) and New South Wales 21 TJ (4 per cent). All other regions recorded minor variations.

Total average daily Gas Powered Generation (GPG) gas usage decreased by 66 TJ (13 per cent) compared to the previous week. All regions recorded decreases, the most significant in South Australia of 31 TJ (15 per cent) and Victoria of 17 TJ (87 per cent).

Average daily production volumes decreased by 82 TJ (4 per cent) compared to the previous week due to reduced production in Victoria. A significant decrease was recorded at facilities in the Otway production zone (84 TJ or 20 per cent). This was mainly due to reduced demand in Victoria and South Australia, with average flows for the week decreasing by 95 TJ on the three pipelines supplying Adelaide and Melbourne from Victorian production zones. The Moomba to Sydney Pipeline also experienced a significant reduction in average flow volumes for the week (24 TJ or 8 per cent) due to lower demand in New South Wales.

Victorian Gas Market

In line with the decrease in demand in Victoria, average gas injections decreased by 64 TJ (7 per cent) compared to the previous week (See Figure V3). The average imbalance price decreased slightly from \$3.06/GJ the previous week to \$3/GJ, influenced by the low prices on Sunday (see Figure V2).

AEMO issued demand overrides on Monday 14 June (-3 TJ) and Wednesday 16 June (6 TJ) (see figure A5).

A number of Supply Demand Point Constraints (SDPCs) were applied this week. Withdrawals at Culcairn were constrained at different levels from Tuesday 15 June to Friday 18 June, with APA advising of urgent repair work affecting compression at Wollert for the 17 June gas day. On the Wednesday 16 June gas day, SDPCs were applied to withdrawals at

Vic Hub and SEA Gas. The following day saw constraints applied to Vic Hub withdrawals, and injections at Vic Hub and Bass Gas.

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
13 June – 19 June	450	45	888	328	43	159	90	75
Financial Year-to-date 2009-10*	372	21	572	286	38	167	86	71
Financial Year-to-date 2008-09**	332	21	624	301	32	171	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
13 June – 19 June	81	3	182	28	166
Financial Year-to-date 2009-10*	85	37	170	24	162
Financial Year-to-date 2008-09**	44	64	185	21	118

^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)
13 June – 19 June	542	1003	345	367
Financial Year-to-date 2009-10*	470	682	286	281
Financial Year-to-date 2008-09**	351	714	318	309

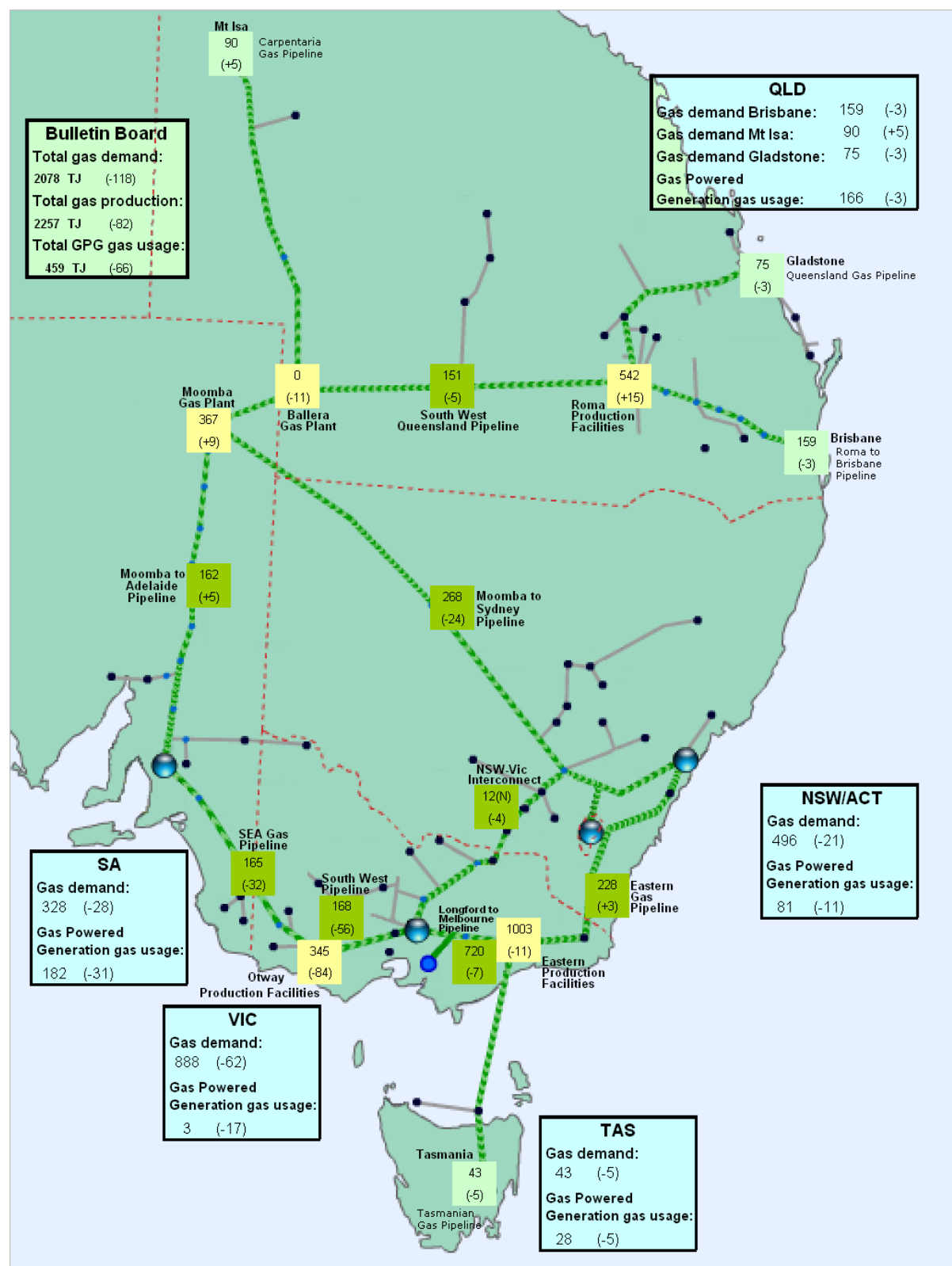
*Average daily estimated gas consumption measured from 1 July 2009 to the current week (inclusive)

**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)



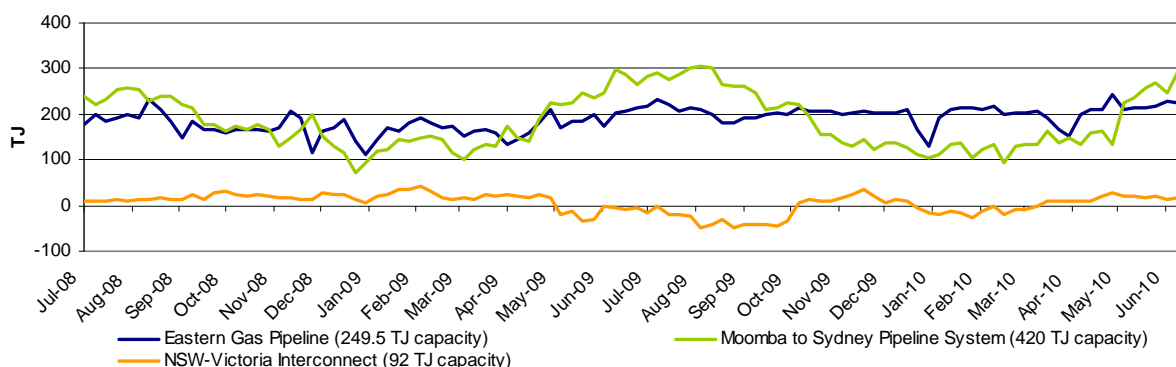
Source: Natural Gas Market Bulletin Board <http://www.gasbb.com.au>

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.

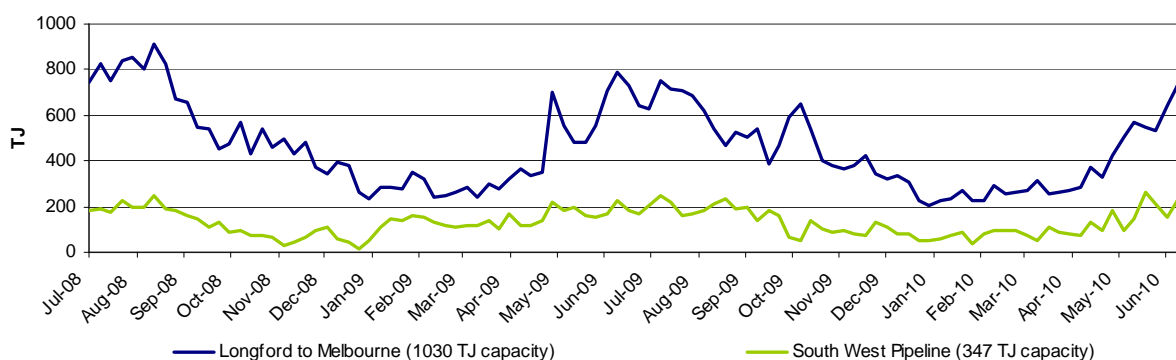
Figure 5: Average daily flows (TJ) into NSW/ACT demand region



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

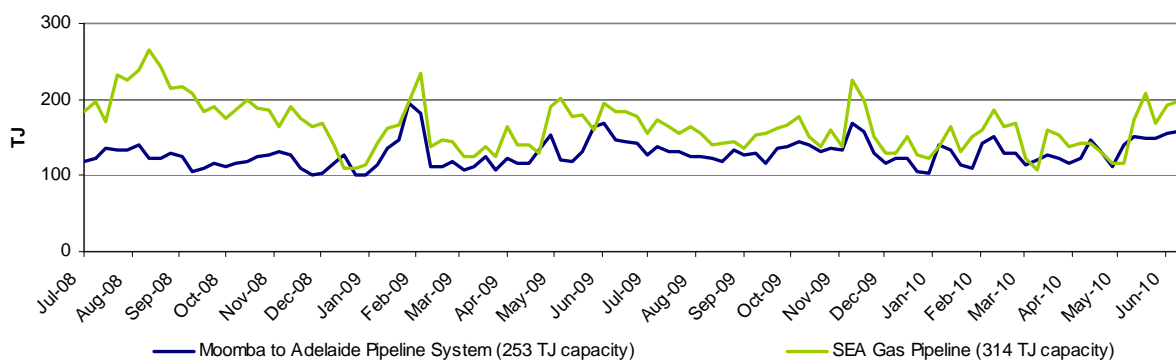
Notes: Negative flows on the NSW-Victoria Interconnect represent flows out of NSW into VIC.

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			
			BassGas	Culcairn	IONA	LNG	Longford	SEA Gas	VicHub	Otway	Culcairn	IONA	SEA Gas	VicHub	
AETV Power	Trader	2					S		S					NS	
AGL (Qld)	Retailer	1				NS									
AGL	Retailer	4		NS	S	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				
Energy Australia	Retailer	3			S		S		S					NS	
International Power	Transmission Customer	1											NS		
Origin (Vic)	Retailer	6	S	NS	S	NS	S	S			S	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		NS			NS		NS	
Victoria Electricity	Trader	2			S				NS			S			
Victoria Electricity	Retailer	5		NS	S	NS		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)

	13 June – 19 June	6 June – 12 June	2009-10 Financial YTD*	2008-09 Financial YTD**
Average daily price	3.00	3.06	1.82	3.01

13 June – 19 June	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Daily price	1.00	3.44	3.64	3.44	2.31	3.75	3.39

*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)

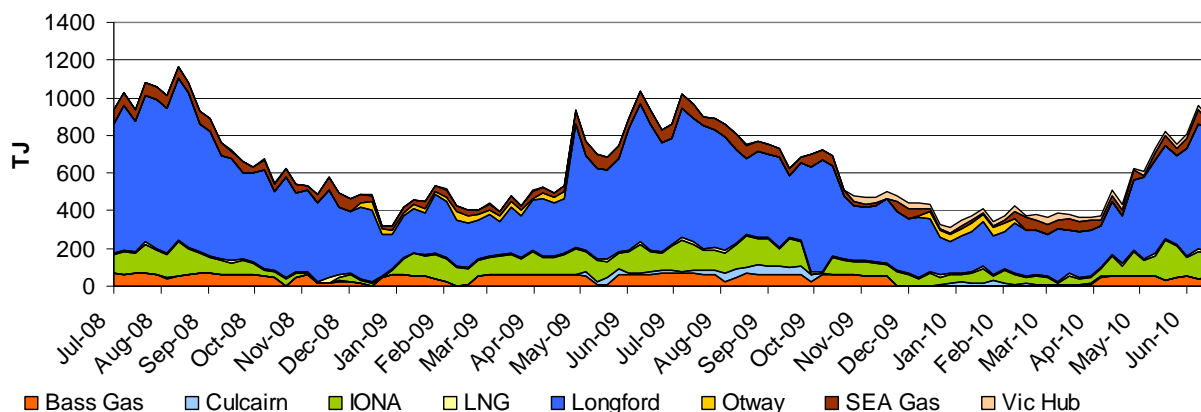
Notes: The daily average market price is a volume weighted imbalance price taking account of trading amounts at five times through the gas day — 6am, 10am, 2pm, 6pm and 10pm.

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:	13 June – 19 June	6 June – 12 June	2009-10 Financial YTD*	2008-09 Financial YTD**
Culcairn	0	0	13	2.7
Longford	650	664	381	453
LNG	9	9	8	9
IONA	128	145	84	83
VicHub	24.3	26.0	18.5	1.5
SEAGas	37	75	42	47
Bass Gas	48	41	34	47
Otway	0	0	7	11
TOTAL	896	959	587	655



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

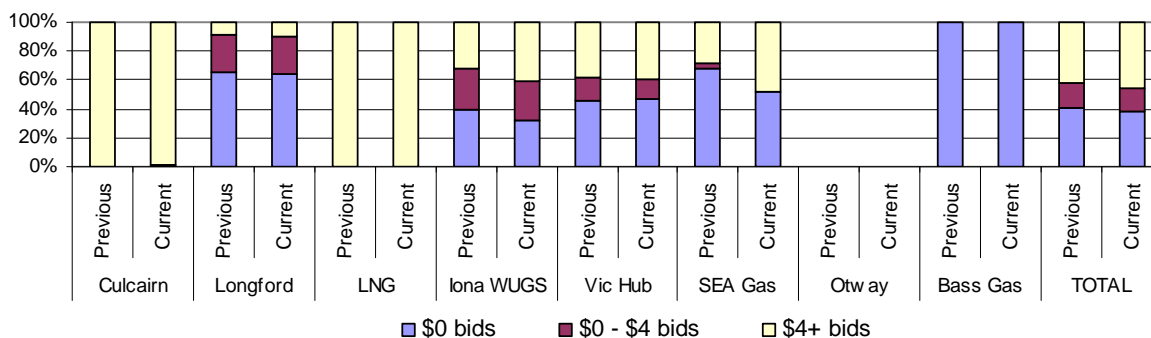
**Average daily estimated gas consumption measured from 1 July 2008 to the equivalent week in 2008 (inclusive)

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							
Longford	TRU	Origin TRU	AGL TRU	AGL Origin TRU APG	AGL Origin TRU	AGL Origin TRU	TRU
LNG				Origin			
Iona	TRU APG	TRU APG	TRU APG	Origin TRU APG	Origin TRU APG	TRU APG	TRU APG
VicHub	AETV	AETV	AETV	AETV	AETV	AETV	AETV
SEAGas		Origin Vic Elec		Origin Vic Elec Simply	Origin Vic Elec Simply	Origin Vic Elec	
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

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:	13 June – 19 June	6 June – 12 June	2009-10 Financial YTD*	2008-09 Financial YTD**
Ballarat	44	45	23	24
Geelong^	104	113	81	85
Gippsland	53	60	45	58
Melbourne	613	644	384	423
Northern	87	94	56	66
TOTAL	901	956	588	657

^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	92	92	89	87	86	90	95	117	74	90	86	83
QLD Gas Pipeline	82	78	65	81	81	82	65	79	90	75	71	67
Roma to Brisbane Pipeline	141	142	159	175	182	170	145	219	76	159	167	171
South West QLD Pipeline	183	149	150	132	138	148	158	181	76	151	138	90
NSW/ACT												
Eastern Gas Pipeline	206	222	233	234	234	232	211	250	81	228	203	174
Moomba to Sydney Pipeline	230	235	305	288	302	278	240	420	45	268	190	180
NSW-VIC Interconnect^	2	7	19	8	12	15	19	92	-5	12	-4	15
VIC												
Longford to Melbourne	687	678	777	774	749	773	603	1030	42	720	432	489
South West Pipeline	115	137	235	225	167	183	112	347	37	168	127	132
SA												
Moomba to Adelaide Pipeline	149	158	181	171	177	166	134	253	52	162	132	126
SEA Gas Pipeline	163	154	209	171	149	154	158	314	49	165	154	175
TAS												
Tasmanian Gas Pipeline	46	45	49	50	50	46	16	129	30	43	38	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	94	100	98	97	100	99	97	140	66	98	92	78
Fairview	129	128	31	128	126	127	127	130	87	114	112	75
Kenya Gas Plant	41	63	65	53	70	52	52	160	35	57	56	
Kincora	0	0	0	0	0	0	4	25	7	1	2	5
Kogan North	11	11	11	11	10	11	11	12	73	11	9	11
Peat	11	9	11	10	10	6	6	15	59	9	9	11
Rolleston	11	12	12	12	12	12	11	30	38	12	11	11
Scotia	26	26	29	29	29	29	29	29	79	28	23	23
Spring Gully	53	46	50	50	53	52	53	60	72	51	43	58
Strathblane	53	46	50	50	53	52	53	60	72	51	43	49
Taloona	32	28	30	30	32	31	32	36	73	31	26	4
Wallumbilla	7	7	11	11	11	11	11	20	51	10	10	12
Yellowbank	9	9	11	14	13	13	14	30	42	12	12	14
Talinga	64	49	66	70	51	58	60	75	27	60	21	
Moomba (SA/QLD)												
Moomba Gas Plant	378	336	394	378	374	357	352	430	63	367	270	278
Ballera	0	0	0	0	0	0	0	150	8	0	11	31
Eastern (VIC)												
Orbost Gas Plant	0	0	0	0	0	0	0	100	18	0	18	0
Lang Lang Gas Plant	54	54	52	51	24	53	51	70	47	48	33	47
Longford Gas Plant	907	885	990	1035	1045	1017	800	1145	55	954	631	667
LNG Storage Dandenong	0	0	0	0	0	0	0	158	0	0	0	1
Otway Basin (VIC)												
Minerva Gas Plant	94	78	94	94	94	94	73	94	76	89	71	88
Otway Gas Plant	74	107	174	123	34	104	84	206	61	100	125	142
Iona Underground Gas Storage	105	135	162	196	207	153	135	440	20	156	90	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)
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
6 June – 12 June	Average min.	11.1	9.0	-0.5	8.5	7.3	4.7
	Average max.	21.7	17.2	12.0	14.4	15.6	11.8

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

13 June – 19 June	Scheduling Interval					Daily Imbalance Weighted Average Price
	6am	10am	2pm	6pm	10pm	
Sun	1.00	0.17	1.02	2.71	2.71	1.00
Mon	3.50	3.57	3.05	0.62	3.42	3.44
Tue	3.64	3.64	3.54	3.50	3.78	3.64
Wed	3.51	3.88	3.87	3.86	0.04	3.44
Thu	2.20	2.43	3.64	3.64	3.83	2.31
Fri	3.75	3.78	3.64	3.64	3.84	3.75
Sat	3.50	0.77	0.77	0.22	2.50	3.39

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	
13-Jun	MP:	858	838	846	843	843	0
	AEMO:	823	844	860	841	815	
	MP as % of AEMO	104	99	98	100	103	
14-Jun	MP:	863	854	844	849	849	-3
	AEMO:	818	811	826	822	819	
	MP as % of AEMO	105	105	102	103	104	
15-Jun	MP:	956	956	958	956	956	0
	AEMO:	904	961	954	948	965	
	MP as % of AEMO	106	99	100	101	99	
16-Jun	MP:	873	1009	1019	1020	972	6
	AEMO:	951	1045	1071	1045	945	
	MP as % of AEMO	92	97	95	98	103	
17-Jun	MP:	895	852	880	881	881	0
	AEMO:	881	842	900	916	930	
	MP as % of AEMO	101	101	98	96	95	
18-Jun	MP:	849	854	857	860	859	0
	AEMO:	904	903	895	910	914	
	MP as % of AEMO	94	95	96	94	94	
19-Jun	MP:	737	736	738	727	727	0
	AEMO:	786	770	753	741	710	
	MP as % of AEMO	94	96	98	98	102	

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