

15 August – 21 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 44 TJ compared to the previous week. While demand in Victoria increased this week by 18 TJ (2 per cent) demand in NSW/ACT decreased significantly, down 54 TJ (10 per cent) from the previous week. Minor decreases were also observed for South Australia and Tasmania, recording decreases of 6 TJ (2 per cent) and 4 TJ (7 per cent) respectively.

Total average daily Gas Powered Generation (GPG) gas usage fell by 61 TJ (12 per cent) compared to the previous week. Decreases were recorded in all states, with more significant decreases observed in Victoria (29 TJ or 88 per cent), South Australia (15 TJ or 9 per cent) and NSW/ACT (12 TJ or 13 per cent).

Average daily production volumes fell by 44 TJ (2 per cent) compared to the previous week. Production decreased by 25 TJ in Victoria, largely influenced by decreased injections at Longford (20 TJ or 2 per cent). Production at Moomba also decreased significantly, falling 27 TJ (7 per cent). Production increased slightly at Roma (8 TJ or 1 per cent). While production in the Otway Basin decreased slightly this week, flows on the South West Pipeline into Melbourne increased as Victoria experienced increased demand. There were decreased average daily gas flows on the SEA Gas Pipeline (20 TJ or 11 per cent) into Adelaide whereas flows on the Moomba to Adelaide Pipeline increased (14 TJ or 10 per cent). Flows on the Moomba to Sydney Pipeline decreased by 48 TJ (16 per cent) compared to the previous week, however flows on the Eastern Gas Pipeline into Sydney only decreased by 6 TJ (2 per cent).

Victorian Gas Market

In line with the increase in demand in Victoria, average gas injections rose by 19 TJ (2 per cent) compared to the previous week (See Figure V3). The average imbalance price increased from \$2.78/GJ the previous week to \$3.08/GJ (see Figure V2). AEMO issued demand overrides of -3 TJ on Monday, -1 TJ on Tuesday and -11 TJ on Wednesday (see figure A5). There were no system constraint notifications this week.

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
15 – 21 August	434	46	965	301	49	189	94	117
Financial Year-to-date 2010-11*	469	49	945	323	50	186	91	94
Financial Year-to-date 2009-10**	457	45	882	286	24	138	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
15 – 21 August	84	4	156	33	162
Financial Year-to-date 2010-11*	87	23	183	35	159
Financial Year-to-date 2009-10**	92	52	147	10	92

[^]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)
15 – 21 August	591	1070	330	355
Financial Year-to-date 2010-11*	564	1066	360	369
Financial Year-to-date 2009-10**	407	894	362	372

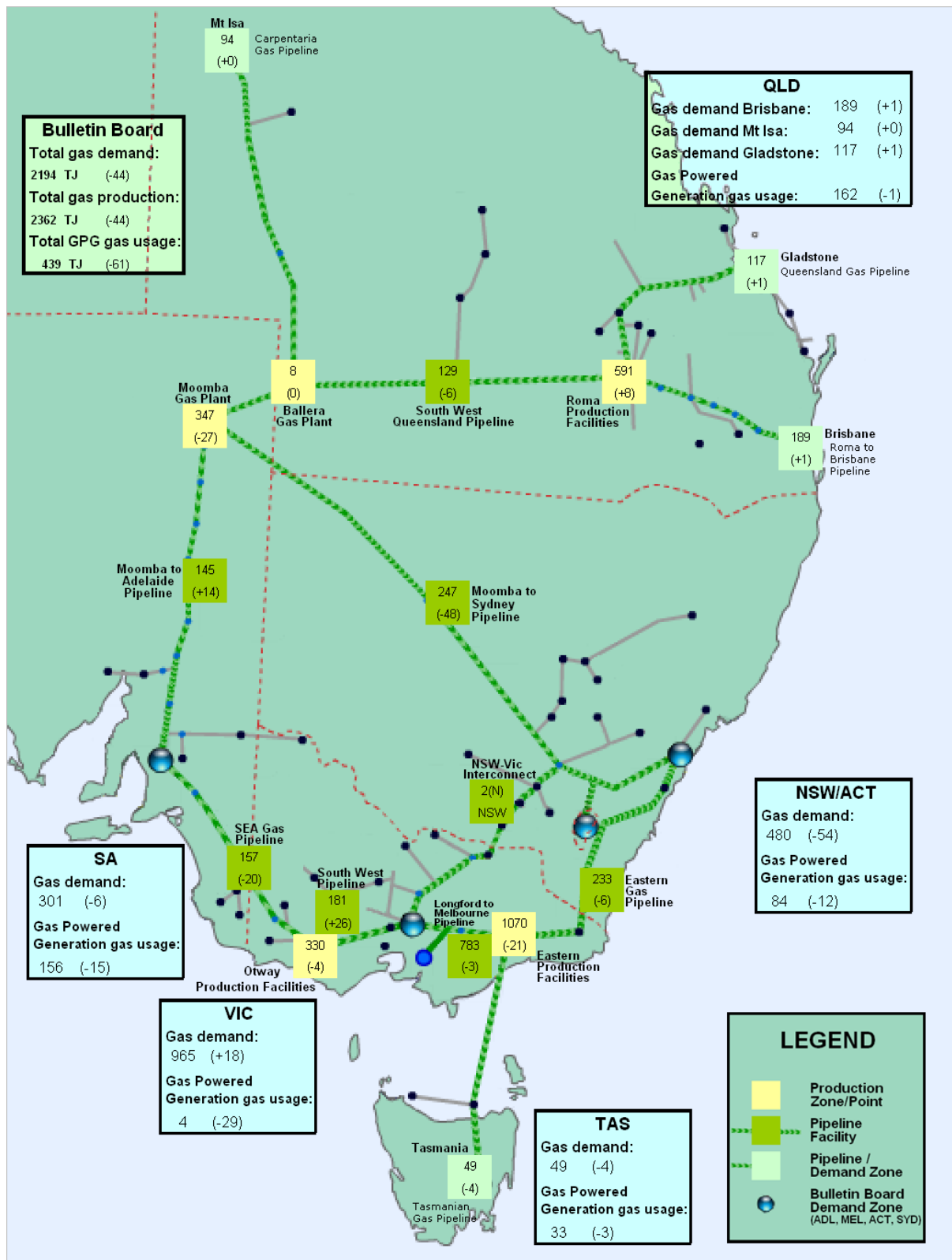
*Average daily estimated gas consumption measured from 1 July 2010 to the current week (inclusive)

**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 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)

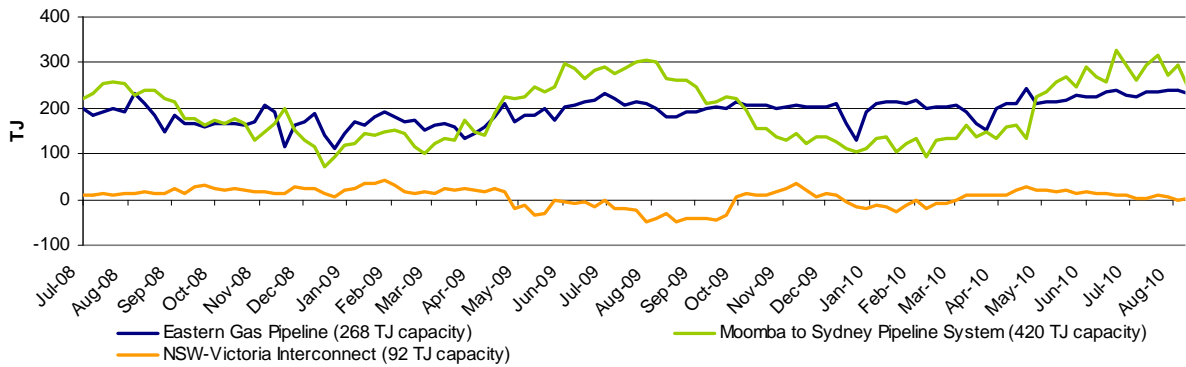


Source: Natural Gas Market Bulletin Board <http://www.gasbb.com.au>
 Notes: Direction of aggregate daily flows along the NSW-Vic Interconnect indicated on map by S (South) or N (North).
 Numbers in brackets indicate a change in average daily flow from the previous week.

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.

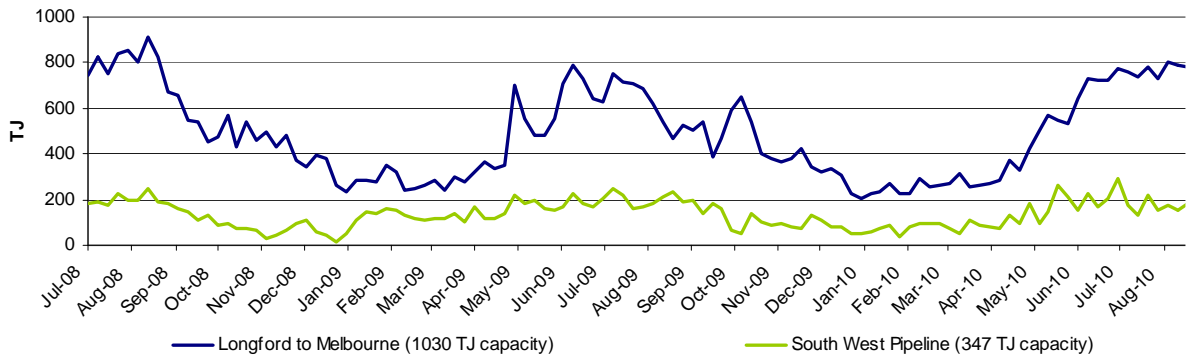
Figure 5: Average daily flows (TJ) into NSW/ACT demand region



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

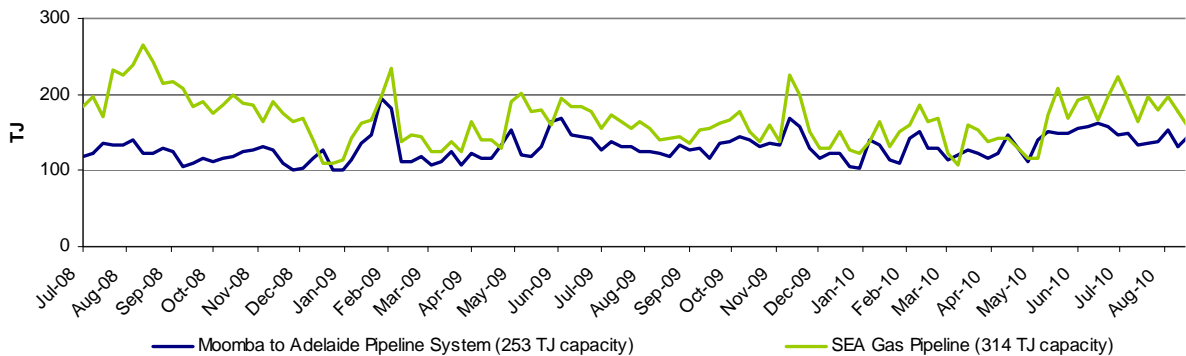
Notes: Negative flows on the NSW-Victoria Interconnect represent flows out of NSW into VIC.

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	1								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						NS		
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			NS		
Origin (Vic)	Retailer	6	S	S	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						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)

	15 – 21 August	8 – 14 August	2010-11 Financial YTD*	2009-10 Financial YTD**
Average daily price	3.08	2.78	2.86	1.75

15 August – 21 August	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Daily price	3.17	3.46	3.17	3.30	1.97	3.30	3.20

*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)

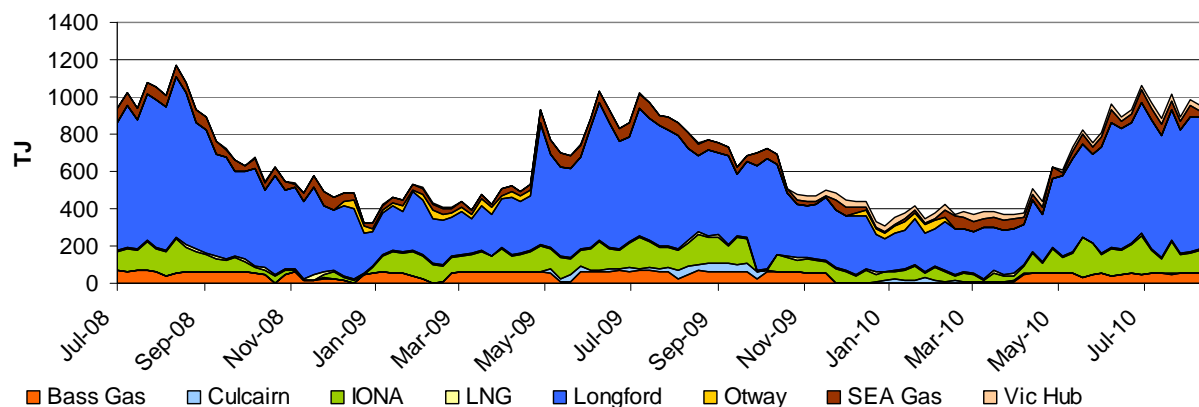
Notes: The daily average market price is a volume weighted imbalance price taking account of trading amounts at five times through the gas day — 6am, 10am, 2pm, 6pm and 10pm.

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:	15 – 21 August	8 – 14 August	2010-11 Financial YTD*	2009-10 Financial YTD**
Culcairn	1	6	2	27
Longford	704	708	691	594
LNG	9	8	8	9
IONA	128	118	122	134
VicHub	33	30	30	1
SEAGas	50	35	51	71
Bass Gas	51	50	51	56
Otway	0	0	0	0
TOTAL	973	954	956	892



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

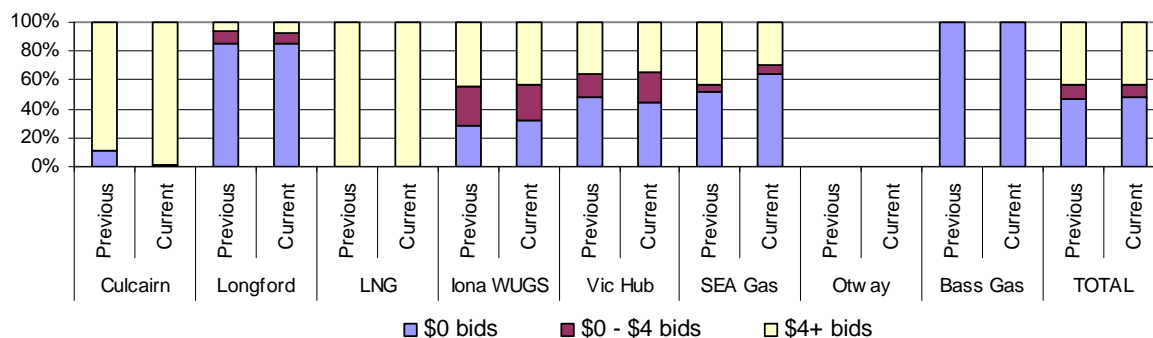
**Average daily estimated gas consumption measured from 1 July 2009 to the equivalent week in 2009 (inclusive)

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	TRU	AGL TRU	AGL	AGL TRU	AGL TRU	AGL TRU	Origin TRU
LNG			AGL (QLD)				
Iona	TRU APG Lumo	AGL TRU APG Lumo	TRU APG Lumo	TRU APG Lumo	TRU APG	TRU APG Lumo	Origin APG
VicHub	AETV	AETV Lumo	AETV	AETV	AETV	AETV	AETV
SEAGas		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)

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:	15 – 21 August	8 – 14 August	2010-11 Financial YTD*	2009-10 Financial YTD**
Ballarat	48	47	46	42
Geelong[^]	109	107	109	98
Gippsland	60	58	58	58
Melbourne	679	670	661	621
Northern	84	80	86	75
TOTAL	979	962	960	895

[^]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	94	94	91	90	95	97	97	117	78	94	91	90
QLD Gas Pipeline	112	115	112	117	120	121	119	142	66	117	94	67
Roma to Brisbane Pipeline	171	195	200	197	194	194	172	219	85	189	186	138
South West QLD Pipeline	159	123	121	120	126	138	120	181	78	129	142	158
NSW/ACT												
Eastern Gas Pipeline	216	246	247	245	228	234	213	268	87	233	233	210
Moomba to Sydney Pipeline	201	261	266	260	238	267	239	420	68	247	285	291
NSW-VIC Interconnect [^]	4	3	2	-1	9	-3	2	92	5	2	4	-25
VIC												
Longford to Melbourne	740	833	790	826	764	805	725	1030	75	783	769	647
South West Pipeline	108	221	174	231	145	237	149	347	50	181	174	208
SA												
Moomba to Adelaide Pipeline	143	158	152	132	149	149	131	253	55	145	140	128
SEA Gas Pipeline	116	184	184	162	151	156	145	314	58	157	184	157
TAS												
Tasmanian Gas Pipeline	46	51	51	51	49	50	47	129	39	49	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	106	105	109	107	106	109	109	140	69	107	96	81
Fairview	130	131	131	131	131	131	131	130	95	131	123	107
Kenya Gas Plant	69	69	65	69	69	69	69	160	37	68	59	21
Kincora	0	0	0	0	0	0	0	25	18	0	4	1
Kogan North	9	8	8	8	8	9	10	12	80	9	10	6
Peat	11	9	8	7	7	7	7	15	69	8	10	11
Rolleston	11	10	11	11	11	11	10	30	38	11	11	11
Scotia	29	29	29	29	29	29	29	29	96	29	28	10
Spring Gully	56	56	56	56	56	55	54	60	89	56	53	52
Strathblane	56	56	56	56	56	55	54	60	89	56	53	52
Taloona	34	34	34	34	34	33	33	36	89	34	32	31
Wallumbilla	9	10	10	10	10	10	10	20	47	10	9	8
Yellowbank	12	13	12	13	13	13	13	30	43	13	13	15
Talinga	62	65	67	66	66	65	32	81	74	60	60	
Moomba (SA/QLD)												
Moomba Gas Plant	341	336	356	364	339	361	334	430	85	347	363	371
Ballera	0	17	8	8	5	0	16	150	4	8	6	2
Eastern (VIC)												
Orbost Gas Plant	0	0	0	0	0	0	0	100	0	0	0	0
Lang Lang Gas Plant	50	50	52	50	50	50	51	70	72	50	51	54
Longford Gas Plant	919	1065	1038	1083	1020	1067	944	1145	89	1019	1015	840
LNG Storage Dandenong	0	0	0	0	0	0	0	158	0	0	0	0
Otway Basin (VIC)												
Minerva Gas Plant	68	94	94	78	83	68	68	94	90	79	85	80
Otway Gas Plant	78	0	130	160	138	130	105	206	68	106	141	148
Iona Underground Gas Storage	68	294	143	153	91	162	105	440	31	145	134	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)
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
8 – 14 August	Average min.	10.8	9.1	0.9	7.7	8.3	4.9
	Average max.	20.9	17.9	12.7	14.1	14.9	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

15 – 21 August	Scheduling Interval					Daily Imbalance Weighted Average Price
	6am	10am	2pm	6pm	10pm	
Sun	3.22	0.50	1.88	2.80	1.65	3.17
Mon	3.46	3.32	3.50	3.25	3.20	3.46
Tue	3.21	3.21	1.67	1.01	1.67	3.17
Wed	3.29	3.28	3.50	3.50	3.30	3.30
Thu	2.06	1.89	0.40	0.15	0.15	1.97
Fri	3.30	3.30	2.66	3.30	3.89	3.30
Sat	3.21	3.21	2.70	1.99	3.20	3.20

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	
15-Aug	MP:	892	889	891	882	883	0
	AEMO:	840	838	847	834	832	
	MP as % of AEMO	106	106	105	106	106	
16-Aug	MP:	1050	1046	1072	1062	1056	-3
	AEMO:	1059	1041	1072	1041	1025	
	MP as % of AEMO	99	100	100	102	103	
17-Aug	MP:	996	1000	1000	998	997	-1
	AEMO:	971	966	970	965	992	
	MP as % of AEMO	103	104	103	103	101	
18-Aug	MP:	1016	988	1030	1019	998	-11
	AEMO:	982	969	1053	1066	1024	
	MP as % of AEMO	103	102	98	96	97	
19-Aug	MP:	1003	985	972	967	967	0
	AEMO:	1011	1019	960	896	905	
	MP as % of AEMO	99	97	101	108	107	
20-Aug	MP:	1049	1025	1020	1019	1019	0
	AEMO:	1019	981	991	1005	1018	
	MP as % of AEMO	103	104	103	101	100	
21-Aug	MP:	856	882	874	873	874	0
	AEMO:	912	892	892	894	911	
	MP as % of AEMO	94	99	98	98	96	

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