

28 February – 6 March 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 aerinqury@er.gov.au, and headed 'Comments on weekly gas report'.

Summary

National Gas Market Bulletin Board

There were eight instances of missing flow data on the Bulletin Board this week. AEMO failed to submit data for the NSW-Vic interconnect, Longford to Melbourne and South West pipelines on the Thursday and Friday gas days. Jemena failed to submit data for the Queensland Gas Pipeline and APA failed to submit data for the LNG storage Dandenong facility for the Friday gas day (see Figures A1 and A2). The AER monitors and reviews patterns of late submission of data and is engaging with facilities to ensure that in future the data requirements of the bulletin board are satisfied.

Figure 4 shows changes in gas demand and production and pipeline flows compared to the previous week. Total average daily demand for gas fell by 206 TJ (15 per cent) compared to the previous week. Significant falls of 118 TJ (32 per cent) and 60 TJ (20 per cent) were recorded in Victoria and South Australia respectively. Queensland recorded a 41 TJ (11 per cent) fall while NSW/Act and Tasmania had small increases.

Total Gas Powered Generation (GPG) gas usage fell by 124 TJ (23 per cent) compared to the previous week. All regions recorded falls with significant falls of 17 TJ (61 per cent) and 63 TJ (33 per cent) recorded in Victoria and South Australia respectively.

Average production volumes fell by 136 TJ (9 per cent) compared to the previous week. All production facilities recorded falls with the largest falls at Otway 63 TJ (23 per cent), Ballera 27 TJ (84 per cent) and Moomba 29 TJ (12 per cent). Average daily flows were lower than the previous week with falls in flow occurring on SEA Gas (27 per cent), South West pipelines (23 per cent) and Moomba to Adelaide (12 per cent). A significant increase was recorded across the South West Queensland pipeline (34 per cent).

The recently commissioned Talinga Gas Plant in the Roma zone recorded zero flows across all days this week compared to previous week where there were flows on five days.

Victorian Gas Market

Total average gas injections in the Victorian gas market fell by 15 TJ (4 per cent) compared to the previous week (See Figure V3).

The average imbalance price fell from \$2.09/GJ in the previous week to \$1.50/GJ in line with the fall in demand.

AEMO did not issue any negative demand overrides.

There were no bids from Bass Gas this week due to the continuation of a scheduled maintenance outage. This outage was originally planned to continue until March 2010. There have also been no bids scheduled at Otway Injection point since February and this continued this week.

The amount of participants rebidding at Vic-Hub declined this week from three participants last week to only AETV Power this week.

Supply Demand Point Constraints (SDPCs) were applied to injections/withdrawals at VicHub on Thursday. In addition, SDPCs were issued for Otway injections on Wednesday. SDPCs were also issued for withdrawals at SEAGas on Friday.

Finally, on Friday 5 March, AEMO experienced problems with its data systems and as a consequence the Day + 1 8 am schedule was published at 9.57 am, beyond the deadline allowed under the National Gas Rules. The AER is discussing these issues with AEMO.

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
Current week (28 Feb - 6 Mar)	335	7	255 [^]	236	44	175	73	69
Financial Year-to-date 2009-10*	367	20	560	284	38	168	86	70
Financial Year-to-date 2008-09**	324	20	617	305	35	170	81	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)

[^]This figure is lower than expected due a failure to submit data by participants

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
Current week (28 Feb - 6 Mar)	68	11	126	27	184
Financial Year-to-date 2009-10*	84	45	166	23	163
Financial Year-to-date 2008-09**	38	70	189	25	112

[^]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)
Current week (28 Feb - 6 Mar)	454	512	207	216
Financial Year-to-date 2009-10*	453	672	284	280
Financial Year-to-date 2008-09**	319	727	312	315

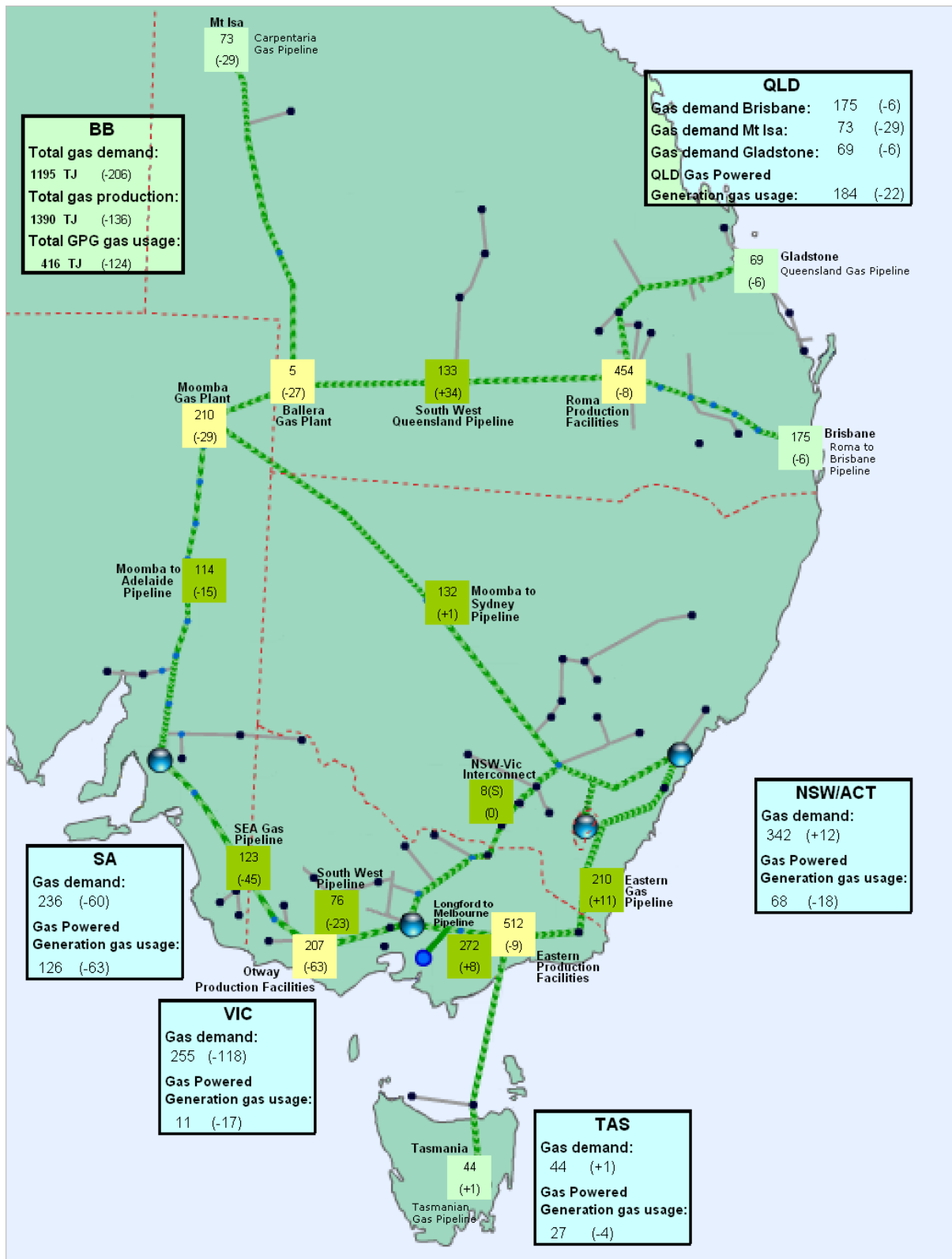
*Average daily estimated gas consumption measured from 1 July 2009 to the current week (inclusive)

**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)



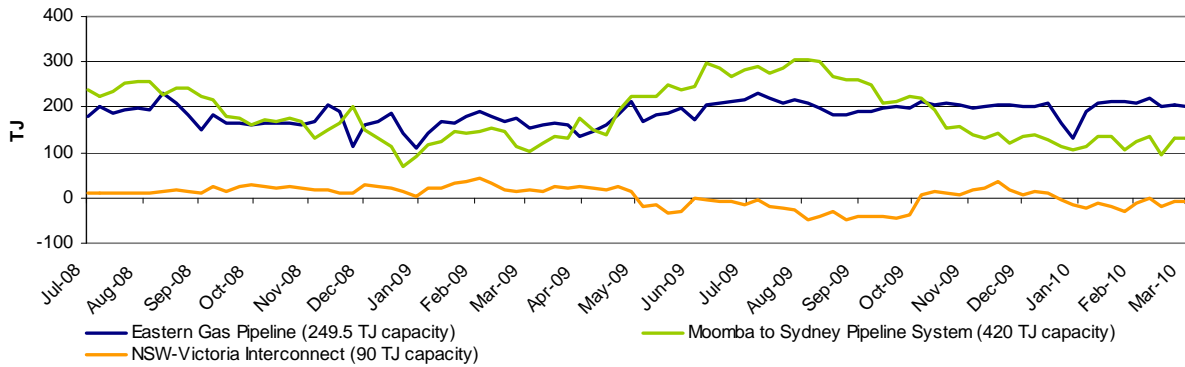
Source: Natural Gas Market Bulletin Board <http://www.gasbb.com.au>

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.

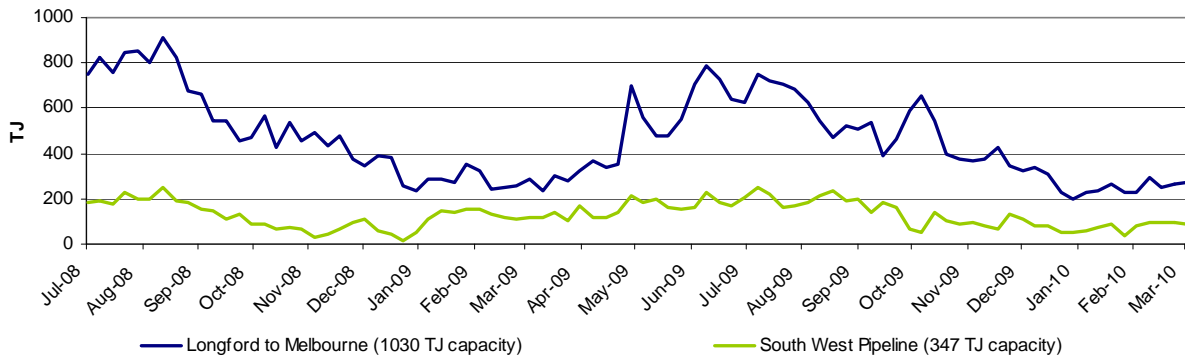
Figure 5: Average daily flows (TJ) into NSW/ACT demand region



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

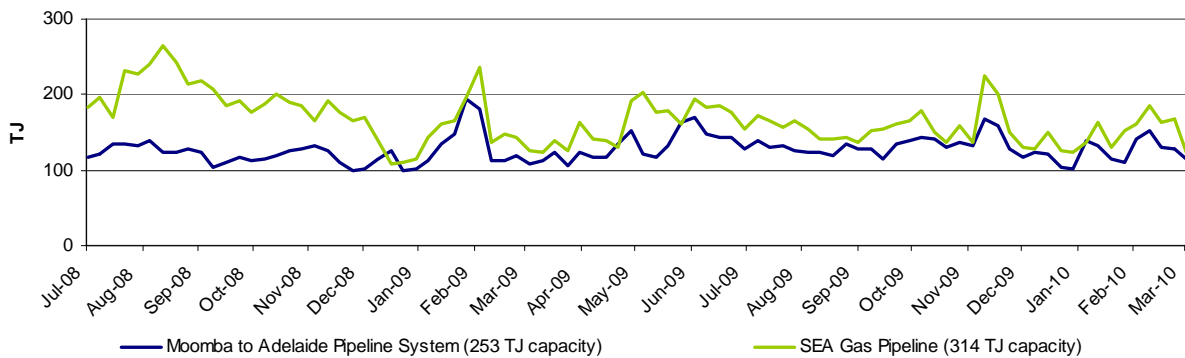
Notes: Negative flows on the NSW-Victoria Interconnect represent flows out of NSW into VIC.

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	VichHub	Otway	Culcairn	IONA	SEA Gas	VichHub	
AETV Power	Trader	1								NS					S
AGL (Qld)	Retailer	1				NS									
AGL	Retailer	4		NS	NS	NS	S				NS	S			
Aust. Power & Gas	Retailer	3				NS	S					S			
Country Energy	Transmission Customer	1									S				
International Power	Transmission Customer	1											S		
Simply Energy	Retailer	3				NS	S	NS							
Origin (Vic)	Retailer	5		S	NS	NS	S	S			NS	S			
Origin (Uranquinty)	Trader	1					S								
Red Energy	Retailer	1					S								
Santos	Retailer	3								S					
TRU Energy	Retailer	4			S	NS	S		NS			NS			
Victoria Electricity	Trader	1										S			
Victoria Electricity	Retailer	5			S	NS		S	S						
Visy Paper	Distribution Customer	2					S				S				
Coogee Energy	Transmission Customer	1					S								
Energy Australia	Retailer	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)

	28 Feb – 6 Mar	21 – 27 Feb	2009-10 Financial YTD*	2008-09 Financial YTD**
Average daily price	1.50	2.09	1.64	3.10

28 Feb – 6 Mar	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Daily price	1.12	2.01	1.92	1.15	1.24	1.98	1.11

*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)

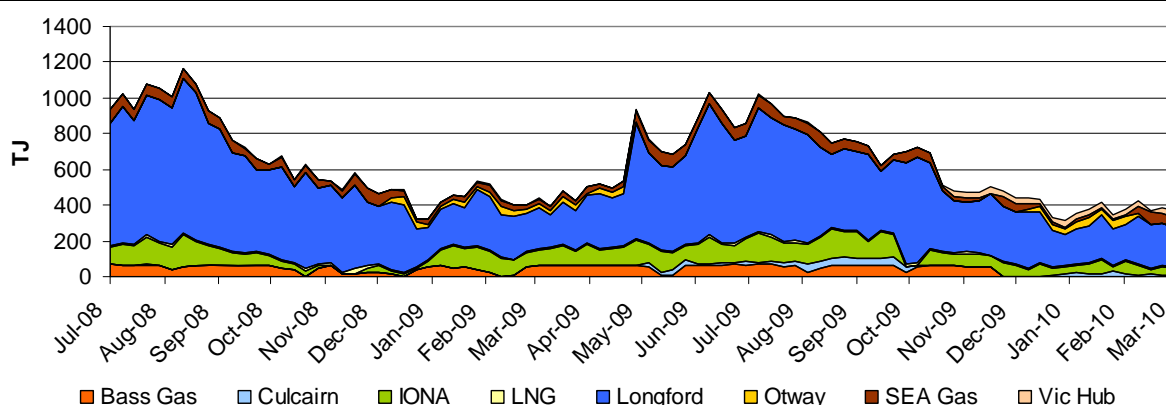
Notes: The daily average market price is a volume weighted imbalance price taking account of trading amounts at five times through the gas day — 6am, 10am, 2pm, 6pm and 10pm.

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:	28 Feb – 6 Mar	21 – 27 Feb	2009-10 Financial YTD*	2008-09 Financial YTD**
Culcairn	9	10	18	0.3
Longford	225	235	376	465
LNG	8	8	8	9
IONA	36	42	80	73
VicHub	39.5	29.3	16.0	1.8
SEAGas	50	56	41	47
Bass Gas	0	0	33	45
Otway	0	0	10	10
TOTAL	367	382	581	652



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

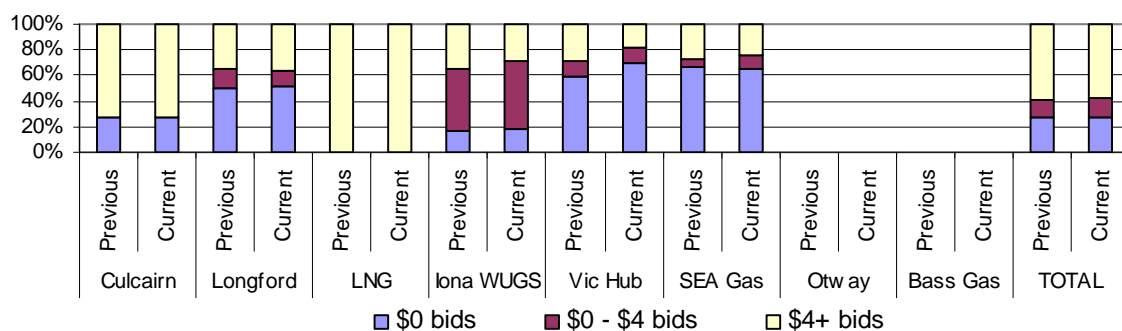
**Average daily estimated gas consumption measured from 1 July 2008 to the equivalent week in 2008 (inclusive)

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	Origin	Origin		AGL	AGL Origin
LNG							
Iona	TRU	TRU	TRU	TRU	TRU Origin	TRU	TRU
VicHub	AETV	AETV	AETV	AETV	AETV	AETV	AETV
SEAGas	Simply	Simply	Simply		Simply	Simply Origin	Simply

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

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:	28 Feb – 6 Mar	21 – 27 Feb	2009-10 Financial YTD*	2008-09 Financial YTD**
Ballarat	11	10	22	23
Geelong^	58	68	81	87
Gippsland	29	34	46	63
Melbourne	234	233	381	413
Northern	35	36	52	67
TOTAL	367	382	582	653

^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	100	89	69	68	67	62	57	117	73	73	86	81
QLD Gas Pipeline	73	69	68	67	66	N/A	73	79	89	69	70	67
Roma to Brisbane Pipeline	168	190	178	165	176	182	169	214	79	175	168	170
South West QLD Pipeline	140	106	92	150	146	164	129	181	77	133	140	68
NSW/ACT												
Eastern Gas Pipeline	146	214	216	214	211	212	195	250	81	210	201	173
Moomba to Sydney Pipeline	83	146	156	141	136	146	118	420	44	132	186	171
NSW-VIC Interconnect [^]	4	-16	-13	0	N/A	N/A	-16	90	-14	-8	-12	19
VIC												
Longford to Melbourne	256	302	285	258	N/A	N/A	260	1030	41	272	424	495
South West Pipeline	69	93	91	111	N/A	N/A	14	347	35	76	123	122
SA												
Moomba to Adelaide Pipeline	102	108	96	116	121	137	115	253	51	114	130	124
SEA Gas Pipeline	111	110	129	143	149	127	90	314	49	123	154	181
TAS												
Tasmanian Gas Pipeline	25	41	44	43	47	46	44	129	30	44	38	35

*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	91	93	106	111	111	110	78	140	65	100	91	65
Fairview	119	120	127	127	126	128	127	115	98	125	112	65
Kenya Gas Plant	75	74	64	64	73	73	73	160	33	71	52	
Kincora	0	0	5	5	5	5	5	25	6	4	2	6
Kogan North	10	9	10	9	10	11	10	12	70	10	8	11
Peat	10	9	10	8	7	7	7	15	56	8	8	11
Rolleston	12	11	12	12	11	12	11	30	38	12	11	11
Scotia	29	21	22	21	21	27	29	27	85	24	23	22
Spring Gully	34	34	34	34	34	38	35	60	73	35	44	56
Strathblane	34	34	34	34	34	38	35	60	73	35	44	47
Talona	21	21	21	21	21	23	21	36	73	21	26	0
Wallumbilla	11	11	11	11	11	11	11	20	54	11	11	13
Yellowbank	0	0	0	0	0	0	0	30	44	0	13	14
Talinga	0	0	0	0	0	0	0	50	13	0	N/A	N/A
Moomba (SA/QLD)												
Moomba Gas Plant	190	213	240	214	222	212	180	430	63	210	270	274
Ballera	0	20	14	0	0	0	4	150	7	5	10	41
Eastern (VIC)												
Orbost Gas Plant	48	65	71	51	51	51	48	92	19	55	17	0
Lang Lang Gas Plant	0	0	0	0	0	0	0	70	46	0	32	45
Longford Gas Plant	397	483	488	483	342	487	522	1140	55	457	621	681
LNG Storage Dandenong	0	0	0	0	0	N/A	0	158	0	0	0	1
Otway Basin (VIC)												
Minerva Gas Plant	59	64	69	78	67	62	40	94	79	63	74	90
Otway Gas Plant	161	161	161	201	199	106	49	206	63	148	130	142
Iona Underground Gas Storage	-20	-17	-12	-37	-27	74	14	320	25	-4	80	81

*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)
28 Feb – 6 Mar	Average min.	22.0	19.2	12.8	16.7	15.8	11.9
	Average max.	27.1	24.4	23.9	25.3	26.9	22.2
21 - 27 Feb	Average min.	21.7	21.1	13.0	17.1	17.8	13.6
	Average max.	30.0	27.8	28.0	26.6	29.6	23.1

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

28 Feb – 6 Mar	Scheduling Interval					Daily Imbalance Weighted Average Price
	6am	10am	2pm	6pm	10pm	
Sun	1.11	1.21	1.25	1.58	1.91	1.12
Mon	2.00	2.56	1.84	2.27	2.27	2.01
Tue	1.91	1.85	2.56	3.10	3.00	1.92
Wed	1.13	1.13	2.25	2.25	2.25	1.15
Thu	1.21	1.21	1.84	2.58	1.90	1.24
Fri	1.92	2.25	2.75	3.05	3.21	1.98
Sat	1.11	1.11	1.11	1.11	2.56	1.11

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	
28-Feb	MP:	327	327	327	330	330	0
	AEMO:	307	309	308	306	325	
	MP as % of AEMO	107%	106%	106%	108%	102%	
1-Mar	MP:	404	404	401	402	402	0
	AEMO:	388	387	386	395	395	
	MP as % of AEMO	104%	104%	104%	102%	102%	
2-Mar	MP:	393	388	388	389	389	0
	AEMO:	378	383	383	384	385	
	MP as % of AEMO	104%	101%	101%	101%	101%	
3-Mar	MP:	372	370	370	369	368	0
	AEMO:	357	359	359	358	359	
	MP as % of AEMO	104%	103%	103%	103%	103%	
4-Mar	MP:	374	373	373	374	374	0
	AEMO:	356	354	345	344	370	
	MP as % of AEMO	105%	105%	108%	109%	101%	
5-Mar	MP:	361	361	141	141	141	0
	AEMO:	363	363	363	363	363	
	MP as % of AEMO	99%	99%	39%	39%	39%	
6-Mar	MP:	303	302	302	160	160	0
	AEMO:	289	284	285	285	285	
	MP as % of AEMO	105%	106%	106%	56%	56%	

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