

SIGNIFICANT PRICE EVENT REPORT

GAS DAY: 22 NOVEMBER 2008

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Approved by:



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1 Note on late publication

Publication of this report has been delayed due to associated dispute resolution and subsequent Supreme Court proceedings which concluded in December 2009.

AEMO as successor to VENCORP has published this report to meet VENCORP's obligations under the Market and System Operations Rules (now superseded by the National Gas Rules)

2 Introduction

VENCorp is required to monitor daily trading activity within the Victorian wholesale gas market to ensure such trading is in accordance with the MSO Rules, and to identify any significant market events in and between trading intervals. This report provides an explanation of the events for 22 November 2008.

The requirement for this report is outlined in the MSO Rules, under Clause 1.2.1 (e)–(h):

- (e) VENCorp must monitor trading activity in the market:
 - (1) with a view to ensuring that such trading is performed in accordance with these Rules; and
 - (2) to identify any significant price variations.
- (f) If VENCorp identifies any significant price variations, VENCorp must:
 - (1) within ten business days notify Participants of this event; and
 - (2) within ten business days following the issue of the final statement for that gas day, prepare a report setting out the identified significant price variations.
- (g) VENCorp must provide a copy of the report referred to in clause 1.2.1(f) to:
 - (1) the Regulator on completion of the report; and
 - (2) Participants and interested persons on request.
- (h) VENCorp must, in consultation with the Regulator, develop guidelines as to what constitutes a significant price variation.

It was agreed between VENCorp and the AER that a significant price variation has occurred when the difference between the imbalance weighted average daily price (IWADP) and the Reference Price (average of IWADP for 30 days prior to gas day) is more than 200%.

The imbalance weighted average price for 22 November 2008 was \$54.88/GJ. This is more than 200% above the Reference Price of \$4.75/GJ, and so a significant price variation is deemed to have occurred.

Summary of Events and Market Outcomes

A combination of plant outages and inclement weather conditions resulted in a significant price variation in the Victorian wholesale gas market on gas day Saturday, 22 November 2008.

As shown in Table 1, the gas spot price reached the price cap of \$800/GJ (VoLL) in the 10pm schedule.

Table 1 – Price Summary 22 November 2008

Market Price				
6am	10am	2pm	6pm	10pm
\$3.50	\$6.02	\$7.50	\$7.50	\$800.00

The gas price was set at VoLL as a result of:

- all available and accessible gas supplies being scheduled; and
- system demand exceeding the available supply.

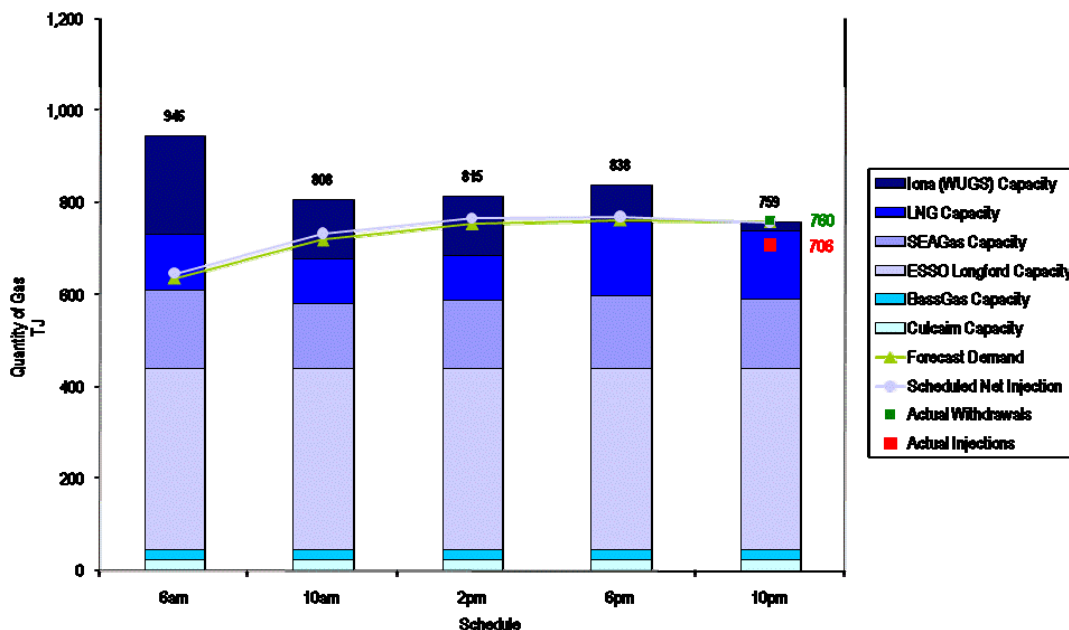
The system was operated without any pressure breaches and no customer supplies were affected. A shortfall in linepack at the end of the gas day was replenished to target levels by the end of 23 November 2008, without significant impact on system operation and market outcomes. Market prices on 23 November 2008 varied between \$3.50 and \$5.97.

Supply Summary

Known reductions in supply capacity at various plants limited the available daily capacity to 1,029 TJ at the 6am schedule. Further issues in plant availability and a reduced scheduling horizon reduced supply capacity to 759 TJ by the 10pm schedule. Under-injections in the final schedule meant total gas injected for the day was 706 TJ. See Section 3 for more detail.

Figure 1 summarises the scheduled and actual injections, the forecast and actual demand, and the available injection capacity for each of the schedules for 22 November 2008.

Figure 1 – Demand, Injections and Available Injection Capacity



Demand Summary

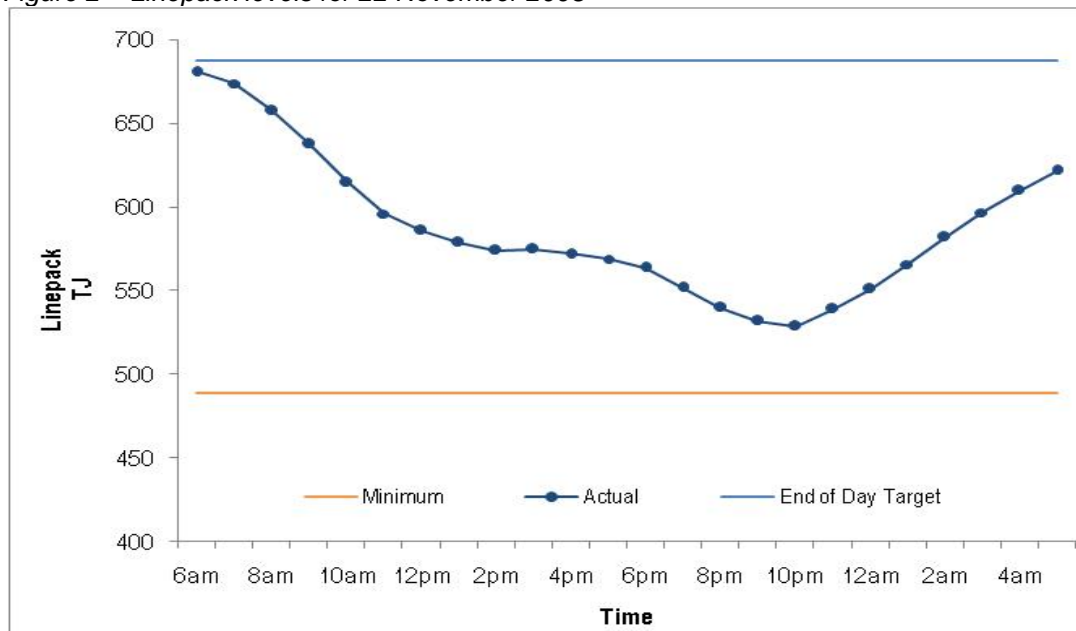
The cold weather for the day produced a higher than expected demand. Total withdrawals for the day were 760.5 TJ. See Section 4 for more details on how demand forecasts varied throughout the day.

Linepack Summary

The gas day started with linepack around just below target (~690TJ) as indicated by the horizontal line in Figure 2. Over the day linepack fell by about 53TJ because of the supply shortfall, particularly after 10pm when linepack could not be restored overnight in the normal fashion. As a result \$13 million was added to the linepack account which would be returned to participants later based on their monthly withdrawals.

System security was maintained throughout 22 November 2008 in accordance with the System Security Guidelines, with no pressure breaches and no impact on supplies to customers. Linepack was restored to normal levels by the end of the following gas day Sunday, 23 November 2008, with 6 TJ of LNG being vaporised on that day. See *Appendix 1: Estimated and Actual Hourly Linepack* for actual hourly linepack on the day.

Figure 2 – Linepack levels for 22 November 2008



Bidding Summary

The 6am market price was set by a \$3.50 bid at Iona UGS by TRUenergy. At the 10am schedule the price was set by a \$6.02 Origin Energy bid for LNG, and the price was set by a \$7.50 Origin Energy bid for LNG for both the 2pm and 6pm schedules.

As a result of scheduled withdrawals being greater than scheduled injections, the 10pm price was set at \$800/GJ (VoLL), which was above the maximum bid price of \$799.99/GJ by International Power at SEA Gas.

Figure 3 – Injection bid stacks for 22 November 2008

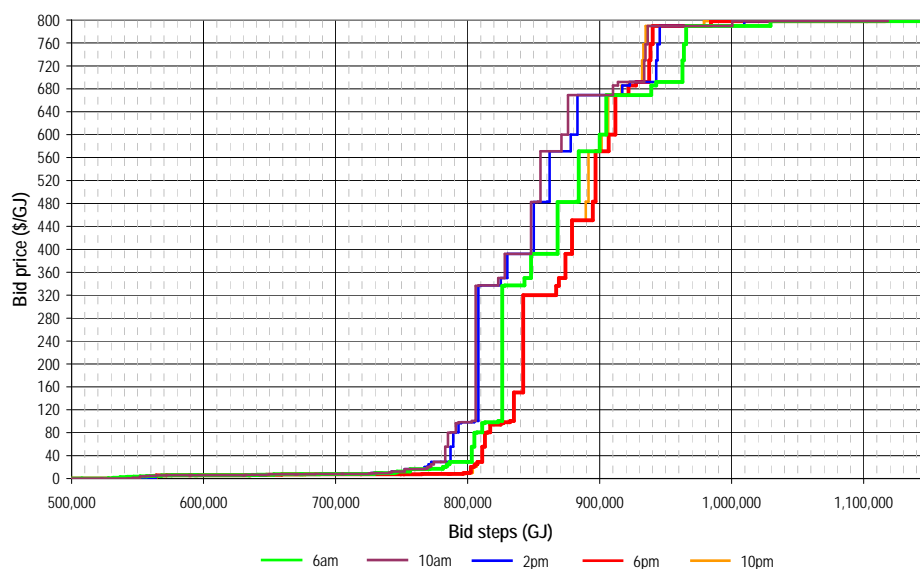


Figure 3 shows that there were some significant changes in bid structure during the day, notably at the 10am and 6pm schedules. However, the figure shows the total quantity of gas offered, and doesn't account for supply point constraints reducing the amount of gas that can actually be scheduled. Full details of LNG and SEA Gas bids are provided in *Appendix 2: LNG Bids* and *Appendix 3: SEA Gas Bids*.

Settlement Outcome Summary

As shown in

Table 2, there were significant settlement outcomes on 22 November 2008 as a result of the high gas price in the 10pm schedule:

- net imbalance payments in the 10pm schedule were \$8.4 million, with +\$48.3 million in positive imbalance payments (by market participants) and -\$39.9 million in negative imbalance payments (to market participants); and
- net deviation payments in the 6pm schedule were \$4.5 million, with +\$14 million in positive deviation payments (by market participants) and -\$9.5 million in negative deviation payments (to market participants).

Table 2 – Price and Settlement Summary 22 November 2008
(Positive amounts are amounts payable by participants)

Schedule	6am	10am	2pm	6pm	10pm	Total
Positive imbalance payments	\$2,234,347	\$163,726	\$112,215	\$391,118	\$48,289,285	\$51,190,691
Negative imbalance payments	-\$2,271,070	-\$559,769	-\$249,463	-\$428,693	-\$39,906,738	-\$43,415,733
Net Imbalance Payments	-\$36,723	-\$396,042	-\$137,248	-\$37,575	\$8,382,547	\$7,774,958
Positive deviation payments	\$270,931	\$342,904	\$189,532	14,043,110	\$355,172	\$15,201,649
Negative deviation payments	-\$78,912	-\$43,140	-\$80,736	-\$9,536,846	-\$61,019	-\$9,800,653
Net Deviation Payments	\$192,019	\$299,765	\$108,795	\$4,506,264	\$294,153	\$5,400,997
Ancillary Payments			-\$1,027		-\$527,666	-\$528,693
Linepack Account						-\$13,175,955

Net imbalance payments over the day were \$7.8 million, and net deviation payments over the day were \$5.4 million. Ancillary payments on the day totalled -\$528,693.

3 Supply

The available injection capacity reduced across the day due to a combination of planned outages, variations to planned outages and unplanned outages and the reductions in the scheduling horizon.

The available injection capacity is defined as:

- what can potentially be supplied at an injection point over the gas day for the 6am schedule, based on supply bids and supply point constraints (see details in *Appendix 4: LNG Hourly Supply Point Constraints*); and
- the scheduled injections to the time of schedule, plus available capacity over the rest of the gas day to 6am i.e. the scheduling horizons for the 10am, 2pm, 6pm and 10pm schedules.

As shown in Figure 1 and Table 3, for the 6am, 10am, 2pm and 6pm schedules there was no expectation of a supply shortfall, as the available injection capacity was higher than the demand. However, there was a decrease of 79 TJ in available injection capacity between the 6pm and 10pm schedules, due to:

- a (further) reduction in the requested supply point constraint for Iona Underground Storage (Iona UGS);
- an under-injection at SEA Gas between 6pm and 10pm; and
- LNG not being scheduled at full capacity at the 6pm schedule.

This reduced available capacity to 758.5 TJ, less than the scheduled withdrawals at 10pm of 760.3 TJ, setting the price at VoLL.

Under-injection deviations during the 10pm to 6am scheduling interval at Iona, SEA Gas and Longford meant the actual injections were lower, totalling 706 TJ for the whole gas day.

These and other supply issues are discussed below.

Table 3 – Available Injection Capacity¹

Injection Point	MIRN	6am Schedule (TJ)	10am Schedule (TJ)	2pm Schedule (TJ)	6pm Schedule (TJ)	10pm Schedule (TJ)
Culcairn	20000001PC	25	25	25	25	25
Longford	30000001PC	397	397	397	397	397
LNG	30000101PC ²	123	98	96	159	147
Iona UGS	30000154PC	213	129	129	80	20
VicHub	30000167PC	0	0	0	0	0
SEA Gas	30000168PC	168	139	148	157	150
BassGas	30000170PC	20	20	20	20	20
Otway	30000181PC	0	0	0	0	0
TOTAL		927	839	846	838	759

3.1 Planned Outages at Longford and Iona UGS

Prior to September 2008, both Esso and TRUenergy UGS had planned maintenance outages at injection points for the latter half of November 2008, Esso a partial outage at its Longford facility,

¹ These values differ from table 4 of the Joint Statement of Facts. They represent the physical limitations of the injection points rather than explicitly using hourly or daily supply point constraints. The Iona capacity is lower, to allow for ramping rates, and LNG capacity is higher, taking into account the maximum injection rate for the rest of the day.

² Logical meter 30000009LC used for actual LNG injections, to avoid including re-injections at 30000101PC

and TRUenergy UGS a complete outage at Iona UGS. The outages were scheduled to overlap over the weekend of 22 and 23 November 2008.

VENCorp submitted a risk assessment on the planned outages to the Gas Market Consultative Committee on 23 September 2008. The risk assessment indicated a low probability of the remaining supply being unable to meet system demand, although the probability of LNG usage would be increased. The assessment also noted that if the outage continued into the normal working week, the probability of LNG usage or curtailment of gas fired generation would increase.

On the basis of this assessment VENCorp did not interfere with the planned maintenance, however it continued to request either party to move their maintenance to avoid the concurrent outage. Subsequently, TRUenergy UGS brought forward the planned Iona UGS outage so the facility would return to service on Saturday, 22 November 2008, avoiding the concurrent outage. However, there was an overrun of the Iona UGS maintenance outage, and its return to service was postponed with each schedule on 22 November 2008, as discussed in Section 3.4.1.

The usual supply capability of Longford into the Principal Transmission System (PTS) is 959TJ/day. The commencement of maintenance at Longford on 22 November 2008 constrained injections into the PTS from this point to 397 TJ/day.

3.2 Unplanned outages

Two unplanned outages impacted supply on 22 November 2008:

- a trip of the Otway plant, reducing supply capacity at SEA Gas between 6pm and 10pm, as detailed in Section 3.4.2; and
- an ongoing operational issue, commencing from 10 November, reduced Bass Gas supply capacity from 67 TJ/day to 20TJ/day.

3.3 LNG Supply

The available LNG capacity reduced through the day, due to not being scheduled at full capacity until the 10pm schedule. LNG was not scheduled at full capacity earlier because lower priced gas was bid as being available.

3.4 Injection Schedule and Deviations

Table 4 shows the variations in the scheduled injections across the day, notably the progressive decrease for Iona and increase for LNG. Changes in scheduled quantities at the 10pm schedule are subject to imbalance payments at the 10pm market price of \$800/GJ, with net increases at LNG and SEA Gas and decreases at Iona subject to significant imbalance payments.

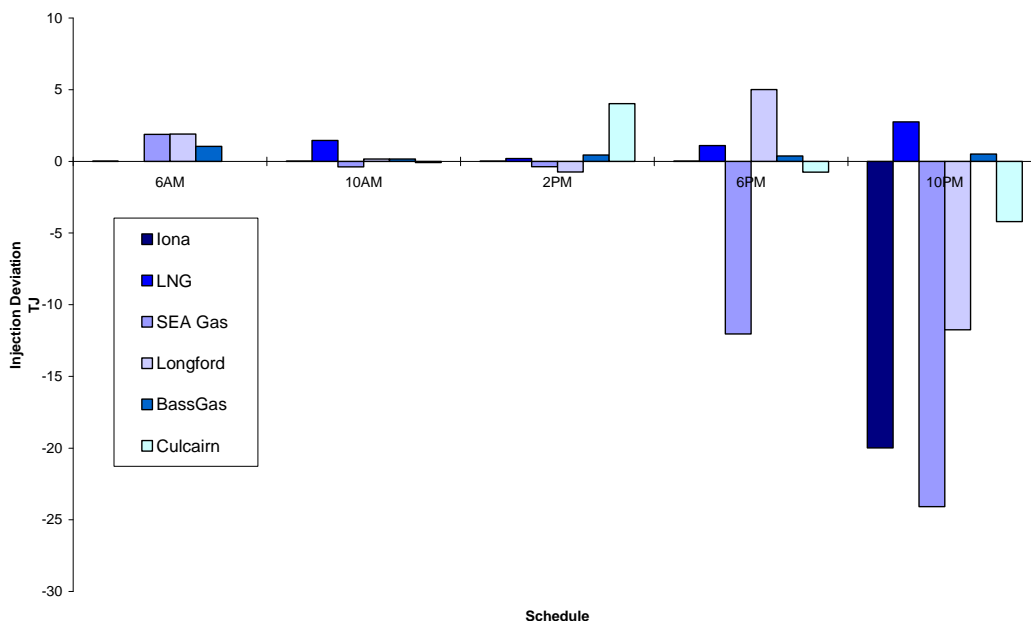
Table 4 – Comparisons of Actual and Scheduled Injections by Injection Point

Injection Point	MIRN	6am Scheduled Injections (TJ)	10am Scheduled Injections (TJ)	2pm Scheduled Injections (TJ)	6pm Scheduled Injections (TJ)	10pm Scheduled Injections (TJ)	Actual Injections (TJ)
Culcairn	20000001PC	-	8.0	25.0	25.0	25.0	24.0
Longford	30000001PC	397.0	397.0	397.0	397.0	397.0	391.6
LNG	30000101PC ³	-	54.7	70.3	121.9	146.8	153.4
Iona	30000154PC	116.9	129.1	129.1	80.0	20.0	0.0
VicHub	30000167PC	-	-	-	-	0.0	0.1
SEA Gas	30000168PC	115.0	127.0	127.0	127.0	149.8	114.8
Bass Gas	30000170PC	20.0	20.0	20.0	20.0	20.0	22.5
Total		648.9	735.8	768.3	770.9	758.5	706.4

In addition to the changes in scheduled injections, there were significant deviations from scheduled injections, as shown in Figure 4, mainly:

- significant net under-injections of 6.7 TJ during the 6pm – 10pm scheduling interval. Deviations in the 6pm – 10pm scheduling interval were subject to the 10pm market price of \$800/GJ; and
- significant net under-injection after 10pm of 54.5 TJ, which resulted in higher linepack mining than scheduled. At the 10pm schedule, linepack was expected to be 11.8 TJ below target, but the actual shortfall was around 60 TJ due to ongoing supply problems. Deviations in the 10pm – 6am scheduling interval were subject to the 6am market price for 23 November of \$5.75/GJ.
- Notable deviations by injection point, as shown in Figure 4, were:
- SEA Gas under-injected by 12 TJ in the 6pm-10pm scheduling interval, and by 24 TJ in the 10pm – 6am scheduling interval. See Section 3.4.2 for more details;
- Iona under-injected by 20 TJ in the 10pm – 6am scheduling interval. See Section 3.4.1 for more details; and
- Longford also under-injected by 11.7 TJ in the 10pm – 6am scheduling interval.

Figure 4 - Injection Deviations by Injection Point and Scheduling Interval



³ Logical meter 30000009LC used for actual LNG injections, to avoid including re-injections at 30000101PC

3.4.1 Injections at Iona UGS

Injections at Iona were subject to supply point constraints throughout the day, due to progressive delays in the expected return from the maintenance outage, as shown Table 5.

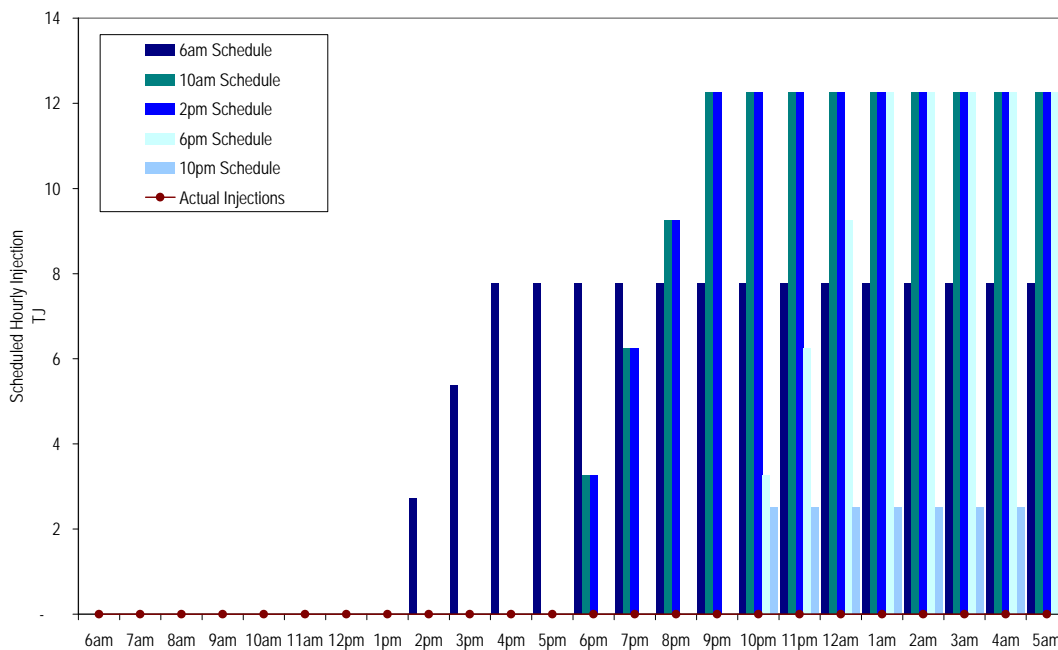
Table 5 - Supply point constraints at Iona

SCHEDULE	Iona UGS
6am	0 TJ/hr flow until 2pm
10am	0 TJ/hr flow until 6pm
2pm	0 TJ/hr flow until 6pm
6pm	0 TJ/hr flow until 10pm
10pm	20 TJ/day

Scheduled injections increased from 116.9 TJ to 129.1 TJ at the 10am schedule, then reduced to 80 TJ at the 6pm schedule, and down again to 20 TJ at the 10pm schedule. There were no actual injections at Iona for the day.

As shown in Figure 5, injections were not scheduled to commence in the current interval at the 6am, 10am, 2pm or 6pm schedules, so there were no deviations at Iona until the 10pm scheduling interval.

Figure 5 - Scheduled and Actual Hourly Injections at Iona



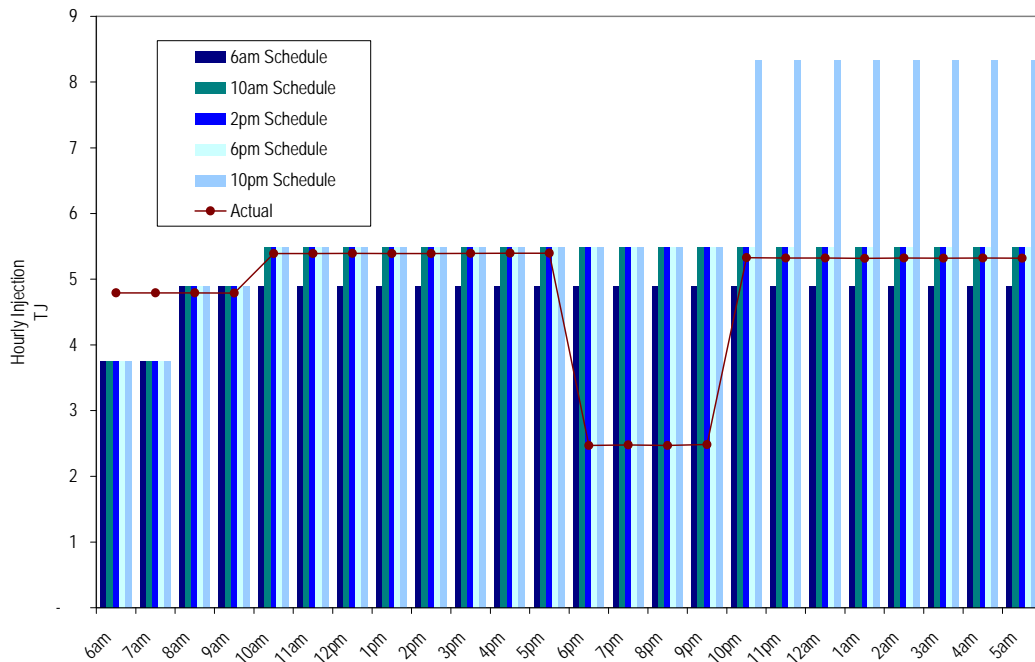
3.4.2 Injections at SEA Gas

SEA Gas was scheduled to inject 115 TJ at the 6am schedule, increasing to 127 TJ at the 10am schedule.

As shown in Figure 6, a trip at the Otway gas plant caused under-injections at SEA Gas during the 6pm scheduling interval. No supply point constraint was applied.

SEA Gas injection increased to 149.8 TJ at the 10pm schedule. Further under-injections in the 10pm scheduling interval meant actual injections at SEA Gas for the day were 114.8 TJ.

Figure 6 - Scheduled and Actual Hourly Injections at SEA Gas



3.5 Summary of Injection Outcomes

Although the actual deviation by each participant at an injection point is dependent on how the injections are allocated, overall:

- participants injecting from SEA Gas between 6pm and 10pm under delivered and paid \$800/GJ for the deviation;
- participants injecting from Longford between 6pm and 10pm over delivered and received \$800/GJ for the deviation;
- participants scheduled to inject from Iona UGS did not receive their gas, and had to buy imbalance gas during the day with the main impact at 10pm when about 48TJ had to be bought at \$800/GJ;
- participants scheduled to inject from SEA Gas and LNG at 10pm received imbalance payments at \$800/GJ;
- there was some rebidding at LNG which was capacity constrained (i.e. could not deliver as much as the system wanted - maximum injection rate of 180 tonnes/hour) which caused parties to swap gas and imbalance payments, creating winners and losers without any impact on the total gas delivered; and
- the end-of-day linepack was about 60TJ below target because of gas supply issues but minimum pressure limits were not breached. This linepack mining meant that the linepack account was in surplus by about \$13 million which will be returned to participants and allocated based on their shares of the total system monthly withdrawals.

4 Forecast and Actual Demand

The demand and weather forecasts are shown below in Table 6. Market participant forecasts shown in the table, except for those at 6am, are adjusted figures that consider the demand evident for past hours of the gas day and the forecast for the remainder of the day.

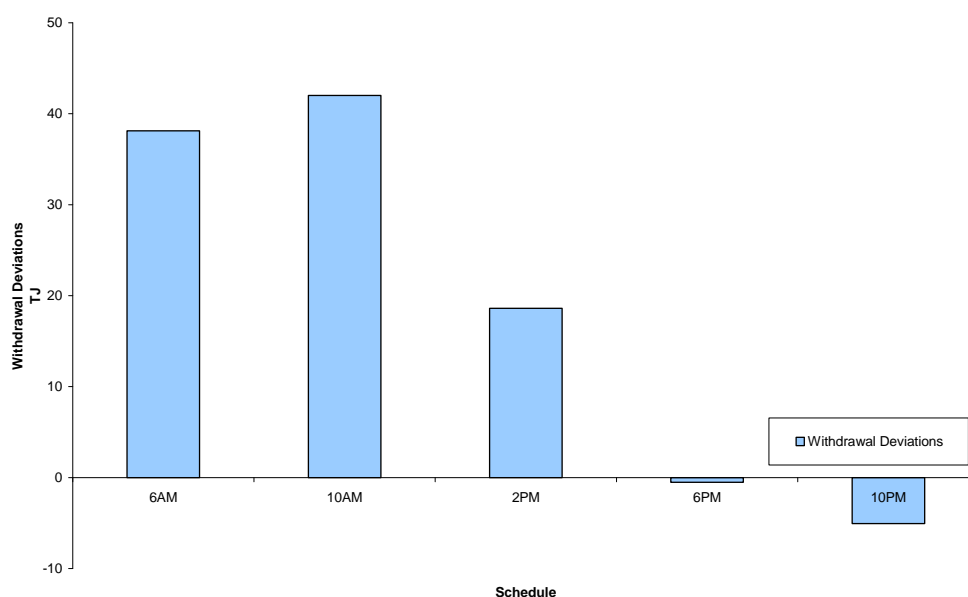
Table 6 - Weather and Demand Forecasts for 22 November 2008

Schedule	Weather Forecast		VENCorp Demand Forecast			MP Demand Forecast		
	Maximum	Minimum	System	GFG	VENCorp Override	System	System adj. extrapolated demand	System adj. extrapolated demand with override
6am	16.0	11.0	639.4	0.0	0.0	635.3	635.3	635.3
10am	14.0	11.0	780.0	0.0	33.0	656.4	686.1	719.1
2pm	14.0	11.0	782.5	0.0	12.0	671.4	741.7	753.7
6pm	14.0	11.0	782.5	0.0	0.0	668.9	762.1	762.1
10pm	14.0	10.0	762.0	0.0	0.0	667.7	758.6	758.6

Actual demand between 6am and 10am was higher than forecast due to actual temperatures being colder than forecast, as shown in *Appendix 5: Actual and Forecast Demand*. VENCorp adjusted its forecast by 10am, and MPs forecast were adjusted in accordance with the published Demand Override Methodology.

As shown in Figure 7, withdrawal deviations were high for the 6am and 10am scheduling intervals, with a net 91 TJ over-withdrawal for the gas day. Although these deviations did not cause significant settlement outcomes, they contributed to the overall shortfall of gas supply by the 10pm schedule.

Figure 7 - Withdrawal deviations by schedule interval



Actual total withdrawal for the day was 760.5 TJ⁴. Controllable withdrawals (exports) for the day were negligible, totalling only 53 GJ, despite a schedule of 1.7 TJ.

⁴ This is the final settlement value for total withdrawals. The 763 TJ in the Joint Statement of Facts is a preliminary value. Note that due to operational reasons, withdrawals are a slight overstatement of actual demand.

5 Conclusions

The 10pm schedule on 22 November 2008 had a supply shortfall which set the price at VoLL (\$800/GJ), which was above the highest bid of \$799.9900/GJ. The shortfall was due to multiple coincident planned and unplanned outages, and higher than expected demand due to cold weather. Despite the shortfall, VENCORP was able to maintain System Security, with no pressure breaches or customer curtailment occurring.

There were significant settlement outcomes, particularly related to deviations in the 6pm scheduling interval, and changes to scheduled quantities at the 10pm schedule, both of which are subject to the 10pm market price.

VENCORP notes that all trading on 22 November 2008 was performed in accordance with the MSO Rules.

VENCORP also notes that with the price at VoLL, any factor impacting scheduled and actual quantities, including supply point constraints, injection allocations and bid prices, can produce significant settlement outcomes.

Appendix 1: Estimated and Actual Hourly Linepack

The data in Table 7 shows the linepack for 22 November 2008; estimated at 10pm in the middle columns and actual on the right hand side columns.

Table 7 – Linepack Estimation at 10:00pm on 22 November 2008 v Actual

Time	Estimated Minimum Linepack		Estimated Linepack		Actual Linepack	
	kscm	TJ*	kscm	TJ*	kscm	TJ*
06:00	12750	498	17427	681	17427	681
07:00	12750	498	17254	674	17254	674
08:00	12750	498	16834	658	16834	658
09:00	12750	498	16313	638	16313	638
10:00	12750	498	15755	615	15755	615
11:00	12750	498	15251	596	15251	596
12:00	12750	498	14984	586	14984	586
13:00	12750	498	14801	579	14801	579
14:00	12750	498	14685	574	14685	574
15:00	12750	498	14703	575	14703	575
16:00	12750	498	14645	572	14645	572
17:00	12750	498	14559	569	14559	569
18:00	12750	498	14436	564	14436	564
19:00	12750	498	14125	552	14125	552
20:00	12750	498	13808	540	13808	540
21:00	12750	498	13598	532	13598	532
22:00	12750	498	13545	529	13545	529
23:00	12750	498	13782	539	13781	539
24:00	12750	498	14177	554	14101	551
01:00	12750	498	14701	574	14490	566
02:00	12750	498	15292	598	14895	582
03:00	12750	498	15893	621	15284	597
04:00	12750	498	16484	644	15601	610
05:00	12750	498	17085	668	15918	622

* TJ figures in the above table are derived from operational data in kscm by applying the Declared Daily State Heating Value for 22 November 2008 of 0.03909TJ/kscm (see MIBB report "int 139")

Appendix 2: LNG Bids

This appendix shows the bid quantity and prices for each market participant bidding at LNG. Scheduled bids are highlighted in yellow. Bid quantities are cumulative by participant.

Table 8 - LNG bids for 22 November 2008

Company	Schedule Bid Step	6am		10am		2pm		6pm		10pm	
		Bid Price	Quantity (TJ)	Bid Price	Quantity (TJ)	Bid Price	Quantity (TJ)	Bid Price	Quantity (TJ)	Bid Price	Quantity (TJ)
AGL Sales (Queensland) Pty Ltd	1	\$5.96	17.0	\$5.96	17.0	\$5.96	17.0	\$5.96	17.0	\$5.96	17.0
AGL Sales Pty Limited	1	\$8.29	20.0	\$8.21	20.0	\$6.25	10.0	\$6.25	10.0	\$6.25	40.0
	2	\$9.68	30.0	\$9.68	30.0	\$8.21	20.0	\$7.51	40.0	\$7.30	50.0
	3	\$12.24	40.0	\$12.24	40.0	\$9.68	30.0	\$8.21	60.0	\$8.21	60.0
	4	\$16.38	55.0	\$16.38	55.0	\$12.24	40.0	\$94.00	68.0	\$94.00	68.0
	5	\$337.00	70.0	\$337.00	70.0	\$16.38	55.0	\$150.00	75.0	\$150.00	75.0
	6	\$571.00	86.0	\$571.00	86.0	\$337.00	70.0	\$320.00	100.0	\$320.00	100.0
	7	\$669.00	120.0	\$669.00	120.0	\$571.00	86.0	\$571.00	110.0	\$571.00	110.0
	8	\$790.00	184.0	\$790.00	184.0	\$669.00	120.0	\$669.00	120.0	\$669.00	120.0
	9	\$790.00	184.0	\$790.00	184.0	\$790.00	184.0	\$790.00	164.0	\$790.00	164.0
Australian Power & Gas Pty Ltd	1	\$5.97	1.0	\$5.97	1.0	\$5.97	1.0	\$5.97	1.0	\$5.97	1.0
	2	\$6.05	2.0	\$6.05	2.0	\$6.05	2.0	\$6.05	2.0	\$6.05	2.0
	3	\$8.25	3.0	\$8.25	3.0	\$8.25	3.0	\$8.25	3.0	\$8.25	3.0
	4	\$9.64	4.0	\$9.64	4.0	\$9.64	4.0	\$9.64	4.0	\$9.64	4.0
	5	\$21.05	5.0	\$21.05	5.0	\$21.05	5.0	\$21.05	5.0	\$21.05	5.0
	6	\$55.47	7.0	\$55.47	7.0	\$55.47	7.0	\$55.47	7.0	\$55.47	7.0
	7	\$100.43	10.0	\$100.43	10.0	\$100.43	10.0	\$100.43	10.0	\$100.43	10.0
	8	\$483.11	12.0	\$483.11	12.0	\$483.11	12.0	\$483.11	12.0	\$483.11	12.0
	9	\$758.05	13.7	\$758.05	13.7	\$758.05	13.7	\$758.05	13.7	\$758.05	13.7
Origin Energy (VIC) PTY LTD	1	\$6.02	40.0	\$6.02	40.0	\$6.02	40.0	\$6.02	40.0	\$6.02	40.0
	2	\$6.80	40.0	\$6.80	40.0	\$6.80	40.0	\$6.80	40.0	\$6.80	40.0
	3	\$7.50	60.0	\$7.50	60.0	\$7.50	60.0	\$7.50	100.0	\$7.50	100.0
	4	\$8.30	80.0	\$8.30	80.0	\$8.30	80.0	\$8.30	110.0	\$8.30	110.0
	5	\$98.19	90.0	\$98.19	90.0	\$98.19	90.0	\$98.19	115.0	\$98.19	115.0
	6	\$392.00	110.0	\$392.00	110.0	\$392.00	110.0	\$392.00	120.0	\$392.00	120.0
	7	\$692.00	130.0	\$692.00	130.0	\$692.00	130.0	\$692.00	130.0	\$692.00	130.0
	8	\$798.00	248.0	\$798.00	248.0	\$798.00	248.0	\$798.00	248.0	\$798.00	248.0
Red Energy Pty Limited	1	\$29.00	3.7	\$29.00	3.7	\$29.00	3.7	\$29.00	3.7	\$29.00	3.7
	2	\$350.00	8.7	\$350.00	8.7	\$350.00	8.7	\$350.00	8.7	\$350.00	8.7
	3	\$600.00	13.7	\$600.00	13.7	\$600.00	13.7	\$600.00	13.7	\$600.00	13.7
Simply Energy	1	\$6.10	1.2	\$6.10	1.2	\$6.10	1.2	\$6.10	1.2	\$6.10	1.2
	2	\$7.69	2.7	\$7.69	2.7	\$7.69	2.7	\$7.69	3.7	\$7.69	5.7
	3	\$10.69	4.7	\$10.69	4.7	\$10.69	4.7	\$10.69	4.7	\$10.69	6.2
	4	\$24.69	6.7	\$24.69	6.7	\$24.69	6.7	\$24.69	6.7	\$24.69	6.7

Schedule		6am		10am		2pm		6pm		10pm	
Company	Bid Step	Bid Price	Quantity (TJ)	Bid Price	Quantity (TJ)	Bid Price	Quantity (TJ)	Bid Price	Quantity (TJ)	Bid Price	Quantity (TJ)
	5	\$79.69	8.7	\$79.69	8.7	\$79.69	8.7	\$79.69	8.7	\$79.69	8.7
	6	\$96.69	10.7	\$96.69	10.7	\$96.69	10.7	\$96.69	10.7	\$96.69	10.7
		\$336.3				\$336.3		\$336.3		\$336.3	
	7	6	12.7	\$336.36	12.7	6	12.7	6	12.7	6	12.7
		\$729.6				\$729.6		\$729.6		\$729.6	
	8	9	13.7	\$729.69	13.7	9	13.7	9	13.7	9	13.7
TRUenergy Pty Ltd											
	1	\$7.70	13.7	\$7.70	13.7	\$7.70	13.7	\$7.70	13.7	\$7.70	13.7
Victoria Electricity Pty Limited											
	1	\$9.35	1.0	\$9.35	1.0	\$9.35	1.0	\$9.35	1.0	\$9.35	1.0
	2	\$9.62	2.0	\$9.62	2.0	\$9.62	2.0	\$9.62	2.0	\$9.62	2.0
	3	\$9.65	4.0	\$9.65	4.0	\$9.65	4.0	\$9.65	4.0	\$9.65	4.0
	4	\$20.05	6.0	\$20.05	6.0	\$20.05	6.0	\$20.05	6.0	\$20.05	6.0
	5	\$80.65	10.0	\$80.65	10.0	\$80.65	8.0	\$80.65	8.0	\$80.65	8.0
		\$686.0				\$686.0		\$686.0		\$686.0	
	6	0	13.7	\$686.00	13.7	0	13.7	0	13.7	0	13.7

Appendix 3: SEA Gas Bids

This appendix shows the bid quantity and prices for each market participant bidding at SEA Gas. Scheduled bids are highlighted in yellow. Bid quantities are cumulative by participant.

Table 9 – SEA Gas bids for 22 November 2008

Schedule		6am		10am		2pm		6pm		10pm	
Company	Bid Step	Bid Price	Quantity (TJ)	Bid Price	Quantity (TJ)	Bid Price	Quantity (TJ)	Bid Price	Quantity (TJ)	Bid Price	Quantity (TJ)
International Power	1					\$29.00	11.0	\$450.69	15.8	\$450.62	10.4
	2					\$482.69	21.0	\$798.00	30.0	\$799.99	45.0
Origin Energy	1	\$0.00	55.0	\$0.00	55.0	\$0.00	55.0	\$0.00	55.0	\$0.00	55.0
Santos Direct	1	\$0.00	11.0	\$0.00	11.0	\$0.00	11.0	\$0.00	11.0	\$0.00	11.0
Simply Energy	1	\$0.00	14.0	\$0.00	29.0	\$0.00	41.0	\$0.00	41.0	\$0.00	41.0
	2	\$2.47	19.0	\$4.00	33.0						
	3	\$2.97	24.0	\$4.51	36.0						
	4	\$3.50	29.0	\$4.90	41.0						
	5	\$4.00	34.0	\$16.93	43.0						
	6	\$4.51	39.0	\$29.00	48.0						
	7	\$4.90	45.0	\$482.69	53.0						
	8	\$16.93	55.0								
	9	\$29.00	68.0								
	10	\$482.70	82.0								
Victoria Electricity	1	\$0.00	20.0	\$0.00	20.0	\$0.00	20.0	\$0.00	20.0	\$0.00	20.0

Appendix 4: LNG Hourly Maximum Supply Point Constraints

The data in Table 10 shows the LNG Supply Point Constraints as applied on 22 November 2008.

Table 10 – LNG Hourly Maximum Supply Point Constraints

LNG – Hourly Maximum Supply Point Constraints (TJ/hour)					
on gas day 22 November (as reported in MIBB report "int 111")					
Hour commencing	6:00am schedule	10:00am schedule	2:00pm schedule	6:00pm schedule	10:00pm schedule
0600	0	0	0	0	0
0700	0	0	0	0	0
0800	0	0	0	0	0
0900	0	0	0	0	0
1000	5.48	0	0	5.48	5.48
1100	5.48	5.48	5.48	5.48	5.48
1200	5.48	5.48	5.48	5.48	5.48
1300	5.48	5.48	5.48	5.48	5.48
1400	9.864	9.864	9.864	9.864	9.864
1500	9.864	9.864	9.864	9.864	9.864
1600	9.864	9.864	9.864	9.864	9.864
1700	9.864	9.864	9.864	9.864	9.864
1800	9.864	9.864	9.864	9.864	9.864
1900	9.864	9.864	9.864	9.864	9.864
2000	9.864	9.864	9.864	9.864	9.864
2100	9.864	9.864	9.864	9.864	9.864
2200	2.74	2.74	2.74	9.864	9.864
2300	2.74	0	0	9.864	9.864
2400	2.74	0	0	9.864	9.864
0100	2.74	0	0	9.864	9.864
0200	2.74	0	0	9.864	9.864
0300	2.74	0	0	9.864	9.864
0400	2.74	0	0	9.864	9.864
0500	2.74	0	0	9.864	9.864
Daily Total	122.75	98.09	98.09	179.74	179.74

Appendix 5: Actual and Forecast Demand

This appendix shows the hourly temperature and demand forecasts for each schedule on 22 November 2008, and compares them to actual temperature and demand.

Figure 8 – Actual versus forecast demand at 6am

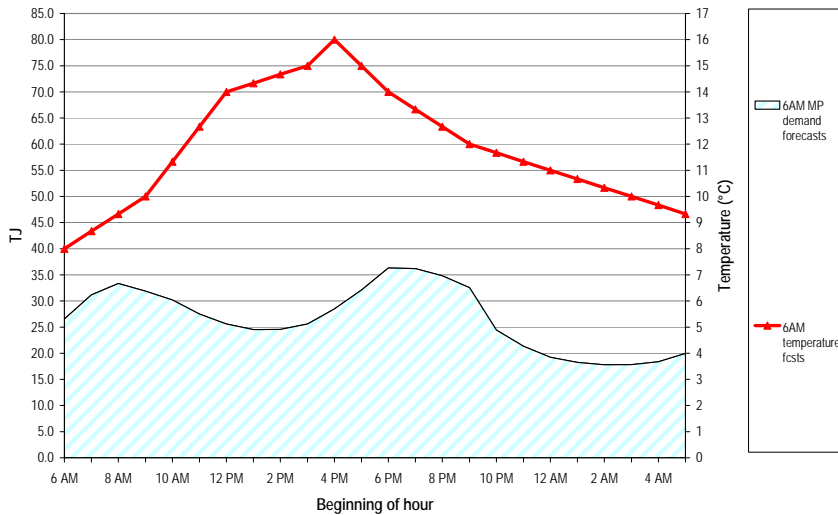


Figure 9 – Actual versus forecast demand at 10am

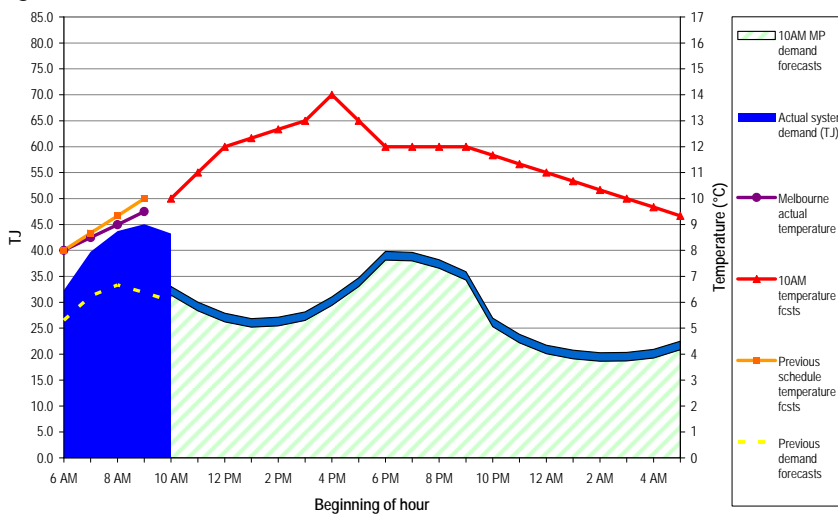


Figure 10 – Actual versus forecast demand at 2pm

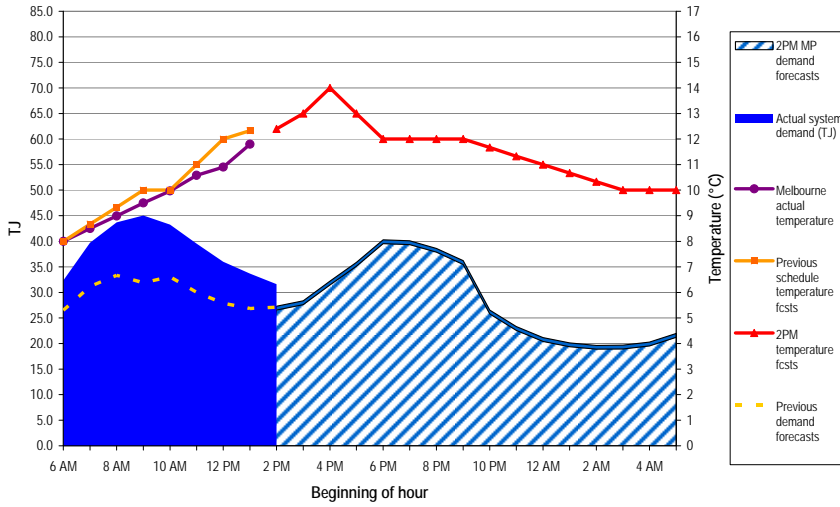


Figure 11 - Actual vs Forecast Demand at 6pm

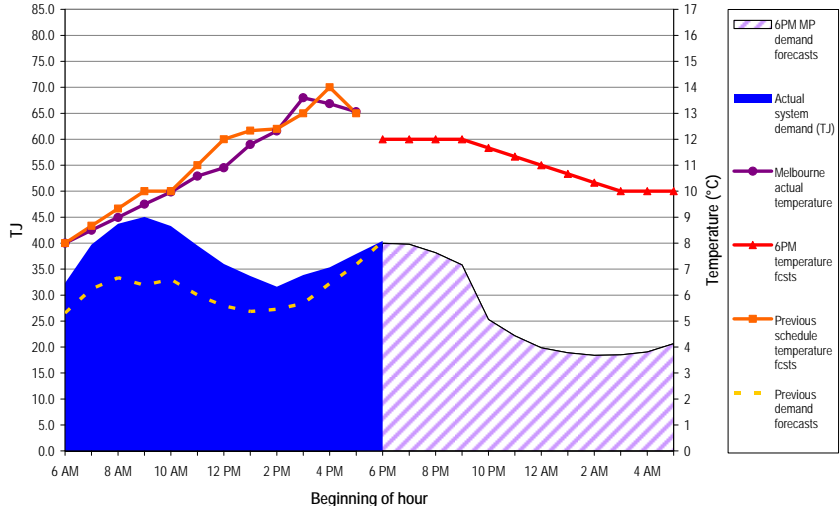


Figure 12 – Actual versus forecast demand at 10pm

