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Submission

to the ACCC Inquiry into the Price of
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List of Acronyms

ACCC	Australian Competition and Consumer Commission
cpl	cents per litre
LPG	liquefied petroleum gas
LRP	lead replacement petrol
PPP Act	<i>Petroleum Products Pricing Act 1983 (WA)</i>
PULP	premium unleaded petrol
TGP	Terminal Gate Price
TGP Order	<i>Petroleum Products Pricing (Maximum Terminal Gate Price) Order 2002 (WA)</i>
ULP	unleaded petrol
YTD	year to date

1. Introduction

Following the recommendations of a Parliamentary Select Committee¹ report, the *Petroleum Products Pricing Act 1983 (WA)* (the PPP Act) was amended in December 2000, to extend the Western Australian Government's price monitoring and control powers in relation to wholesale and retail fuel prices. The PPP Act empowers the Prices Commissioner to monitor and regulate fuel prices to prevent excessive prices being charged for the wholesale and retail sale of petroleum products and for the supply of petroleum services in Western Australia.

In addition, a wholesale monitoring system was established for unleaded petrol, premium unleaded petrol, lead replacement petrol and diesel. The monitoring system was established on 19 December 2002 by the *Petroleum Products Pricing (Maximum Terminal Gate Price) Order 2002 (WA)* (the TGP Order).

As a vehicle for administering the PPP Act, the Western Australian Government established a comprehensive fuel price monitoring service in January 2001 known as "FuelWatch".

1.1 Purpose of FuelWatch

The purpose of the FuelWatch program is to represent the interests of consumers by providing price transparency and certainty at the wholesale and retail levels of the Western Australian fuel market. FuelWatch enables motorists to make informed decisions about their fuel purchases, which puts downward competitive pressure on fuel prices.

1.2 Fuel Price Monitoring

The FuelWatch database is used to store information about daily retail fuel prices and terminal gate prices that are notified to the Prices Commissioner. The PPP Act requires fuel retailers within the FuelWatch boundaries to notify the Prices Commissioner about their prices for the next day by 2pm. Prices for unleaded petrol (ULP), premium unleaded petrol (PULP), diesel, liquefied petroleum gas (LPG), RON 98 and biodiesel blends must be provided to the Commissioner and are recorded in the FuelWatch system.

¹ Select Committee on Pricing of Petroleum Products *Getting a Fair Deal for Western Australian Motorists* Report 12 October 2000.

Through the FuelWatch website (<http://www.fuelwatch.wa.gov.au>), an automated telephone system and a free personalised e-mail service, motorists are able to obtain information about the cheapest fuel in their area. Consumers and other interested parties can access the FuelWatch website and automated telephone system 24 hours a day, 7 days a week, with tomorrow's fuel prices available from 2.30pm daily.

Data about relevant international benchmark prices is obtained from external sources each day and used in the course of monitoring prices. These data also are made available on the FuelWatch website.

As well as monitoring daily wholesale and retail fuel prices, FuelWatch compares:

- terminal gate prices notified by the oil companies with the relevant international fuel benchmark price movements; and
- average retail petrol prices for the major fuel retail companies operating in Perth with terminal gate prices.

This information has been produced on a monthly basis since January 2003, after the introduction of the Terminal Gate Pricing arrangements.

The FuelWatch system is unique. It provides a complete daily census of retail fuel prices in Western Australia within the FuelWatch boundaries, which cover 80% of the State (including 100 per cent of metropolitan Perth's petrol retailers which at 25 July 2007 numbers 303). The data used in this Submission largely are drawn from the FuelWatch database, and provides the most comprehensive picture of retail fuel prices available in any Australian marketplace.

2. Structure of the Retail Fuel Market in Western Australia

The number and complexity of the retail arrangements in the fuel market tend to pose some difficulties. Nevertheless, systematic monitoring of the retail market in WA has been undertaken since the FuelWatch program was established in 2001.

To assess the Western Australian retail market, the following categories of retailers have been used.

- Branded Independent: A service station owned by an independent operator, but having the branding of an oil company or independent chain. This type of site makes up a majority of regional sites.
- Company Controlled/Price Supported: A service station whose price is set directly or indirectly (i.e. via a price support mechanism) by an oil company. These sites are either operated directly by the oil company, or operated on their behalf by a multi-site franchisee. This type of site is very common in the metropolitan Perth area, but only a handful exist in regional WA.
- Distributor Controlled: These are sites owned and operated by a distributor. These are more common in regional WA than in the metropolitan area. The figures for WA also include unmanned sites (which require a motorist to pay via credit card or EFTPOS).
- Independent: These are sites that have no branding, and are owned by an independent operator.
- Independent Chains: These are sites that are owned by a large independent company – in Western Australia, these companies are Gull, Peak and United. These sites are predominantly located in metropolitan Perth.
- Supermarket: These are sites operated by a supermarket chain, such as Coles Express or Woolworths.

Table 1 shows the changes in the WA market structure for sites included within the FuelWatch boundaries (approximately 80% of retail sites in WA including 100% of metropolitan Perth petrol retailers) from March 2001 to June 2007.

Table 1: Changes in proportion of categories of retailers (within FuelWatch boundaries)

<i>category</i>	<i>March 2001</i>	<i>June 2007</i>	<i>change</i>
Branded Independents	34%	36%	2%
Company Controlled/Price Supported	42%	18%	-24%
Distributor Controlled	8%	9%	1%
Independent	2%	5%	3%
Independent Chain	13%	12%	-1%
Supermarket	2%	19%	17%

Table 1 indicates that most site closures since 2001 have been company controlled or price supported sites. Of the 17% increase in supermarket sites, almost all of these are sites that have changed ownership from an oil company to a supermarket chain.

Since 2001, the absolute number of independent, branded independent and independent chain owned sites has decreased. However the proportion of sites operated by independent operators has increased slightly.

Coles Express took over and commenced operating 62 Shell retail fuel sites across Western Australia on 15 March 2004. Of these, 57 were located within FuelWatch price reporting boundaries, with 41 located in the Perth metropolitan area, and 16 in regional Western Australia (within FuelWatch boundaries). On 30 June 2007, Coles Express had 55 sites within the FuelWatch boundaries, with 39 sites in the Perth metropolitan area, and 16 in regional Western Australia (within FuelWatch boundaries).

Woolworths commenced retailing fuel in Australia in 1996, operating Woolworths Petrol Plus sites. Caltex and Woolworths announced they would be rolling out co-branded sites by Christmas 2003. In 2004, Caltex and Woolworths announced that the existing Woolworths Petrol Plus branded sites would be converted to Caltex Woolworths sites. On 30 June 2007, Caltex Woolworths had 56 sites within FuelWatch boundaries, with 46 sites in the Perth metropolitan area, and 10 in regional Western Australia (within FuelWatch boundaries).

The number of metropolitan retail fuel outlets has decreased from 391 in 2001 to 303 in 2007. On average, the number of sites has decreased by approximately 4% per year since 2001.

The decline in regional retail fuel outlets within the FuelWatch boundaries has been less than the decline in metropolitan outlets. Between 2001 and 2002 the number of regional sites within the FuelWatch boundaries remained constant. In 2003, a number of sites were added as the FuelWatch boundaries were expanded. In 2006, three sites in Southern Cross were removed from the FuelWatch boundaries. Between 2003 and 2007, after adjusting for these changes, the number of regional retail fuel outlets decreased by approximately 9%. In the same period, the number of metropolitan sites decreased by approximately 15%. Table 2 shows the maximum number of metropolitan and regional sites within the FuelWatch boundaries in each year since 2001

Table 2: Maximum number of retail fuel outlets within the FuelWatch boundaries by year from 2001 to 2007

<i>location</i>	<i>years</i>						
	<i>2001</i>	<i>2002</i>	<i>2003(*)</i>	<i>2004</i>	<i>2005</i>	<i>2006(#)</i>	<i>2007</i>
Maximum number of metro sites	391	373	365	348	337	324	307
Maximum number of non-metro sites	213	213	316	312	302	298	285

* the FuelWatch boundaries were expanded in 2003 to include more regional areas

three outlets from Southern Cross were removed from the FuelWatch boundary in 2006.

2.1 Market Share By Volume

Fuelwatch has obtained data about price and volume of sales for retail sites in the Perth metropolitan area and Mandurah for 2004 and 2005². These outlets had ownership structures categorised as company controlled, independent chain or supermarket. Table 3 shows the relative proportion of ULP sold by sites in each category for the last quarter of 2004 and the last quarter of 2005.

² Information about the collection and analysis of volume of sales and price data is included in Appendix B.

Table 3: Proportion of Perth ULP volume sold by categories of retailers

<i>category</i>	<i>2004</i>	<i>2005</i>	<i>Overall</i>
Company Controlled	25%	22%	23%
Independent Chain	17%	13%	15%
Supermarket	58%	65%	62%
Total	100%	100%	100%

This analysis shows that the supermarket controlled outlets sell a majority by volume of ULP in Perth and Mandurah, and that this proportion increased by 7% between 2004 and 2005. Similar data about volume of sales has not been obtained for 2006 or 2007.

3. Retail Prices in Western Australia

Figure 1 at Appendix A shows the long term price trend for ULP in Perth. These data are based on analysis of the daily retail price for ULP notified to the Prices Commissioner by every retail site within the FuelWatch boundaries. The graph shows that the average monthly price for ULP in the Perth metropolitan area has increased from 84.9 cpl in January 2001 to 129.9 cpl in June 2007, an increase of 53%. Figure 1 also shows the upwards “spike” caused by Hurricane Katrina in September 2005.

3.1 Price Cycles

As in other Australian capitals, ULP prices in the Perth metropolitan area are subject to retail price cycles. Each price cycle in Perth is nearly always instigated by BP increasing its petrol prices by more than 4 cpl and up to 14 cpl simultaneously at a number of sites. This price hike is then followed by other fuel retailers during the next day or two.

Price cycles in Perth have been predominantly 14 days since January 2006. Between September 2005 and December 2005, no price cycle was present. A comparison between the lengths of Perth price cycles and those in Eastern States capitals is shown in Table 4.

Figure 11 in Appendix A compares the price cycles for Perth and Eastern States capitals between January 2007 and June 2007. The graph shows that Perth ULP prices are less variable than in the Eastern States.

Table 4: Average length³ of ULP price cycles in days for Australian capital cities 2003 to 2007

<i>year</i>	<i>capital cities</i>				
	<i>Perth</i>	<i>Sydney</i>	<i>Melbourne</i>	<i>Brisbane</i>	<i>Adelaide</i>
2003	8.3	6.9	8.0	7.5	8.0
2004	7.9	7.0	9.3	8.0	8.5
2005	9.6	7.4	9.4	9.9	7.0
2006	13.4	7.1	8.3	7.9	7.0
YTD 2007	15.2	7.6	7.3	7.3	7.6

³ Average number of days between price hikes

Since January 2006, Perth ULP price hikes have been almost exclusively lead by BP. The most common day for the start of a new cycle is Monday. The larger independent chains and supermarkets are price followers in Perth ULP price cycles.

To assist consumers in buying fuel at the best available price, FuelWatch issues a "Price Hike Alert" the day before each price hike, encouraging consumers to buy fuel before other retailers increase their fuel prices. Price hike alerts are displayed on the FuelWatch website and are sent to email subscribers (approximately 29,000 daily) including the media.

One oil company has told FuelWatch unofficially that it no longer leads price hikes in WA due to the negative publicity it generates. This is not the case for the same company in the Eastern States. It is likely that the alerts issued by FuelWatch have had some influence on price cycles in Perth and on the difference between Perth and Eastern States price cycles.

Perth also has a smaller range between the top and bottom of the ULP price cycle. The average of price hikes in Perth during 2007 has been 7.8 cpl with lower cycle peaks (see Figure 11 in Appendix A), whereas the average of price hikes for the same period in Eastern States capitals is higher, as shown in Table 5 below.

Table 5: Average range⁴ of prices for ULP during price cycles in cpl

<i>year</i>	<i>capital cities</i>				
	<i>Perth</i>	<i>Sydney</i>	<i>Melbourne</i>	<i>Brisbane</i>	<i>Adelaide</i>
<i>2003</i>	5.8	6.7	7.4	7.0	7.4
<i>2004</i>	3.7	5.4	6.3	5.4	6.0
<i>2005</i>	3.3	6.5	5.3	5.4	4.5
<i>2006</i>	6.4	8.6	9.2	8.2	7.9
<i>YTD 2007</i>	7.8	8.8	9.4	9.2	9.5

Price cycles do not occur in regional areas of Western Australia.

⁴ Difference between the highest price in the price cycle and the lowest price

3.2 Role of Supermarkets and Independents

The entry of supermarkets into the petrol retailing market initially stimulated competition in the metropolitan fuel market with many of the other brands reducing their prices to compete with the supermarkets.

On their first day of trading in Perth (16 March 2004) the average price for ULP charged in the Perth metropolitan area by Coles Express was 88.6 cpl and by Woolworths was 89.7 cpl. On the same day the average price for ULP in the Perth metropolitan area excluding Coles and Woolworths was 97.1 cpl. Coles and Woolworths had 49 of the 50 lowest prices in Perth on that day.

The March 2004 entry of Coles Express into the Perth retail fuel market coincided with a sharp decrease in retail margins. This is clearly evident in Figure 9 of Appendix A which traces the average monthly retail margin indicator since 2003.

Table 6 shows that supermarket controlled outlets along with those controlled by independent chains have maintained the lowest ULP prices in the Perth retail market since 2004.

Table 6: Average annual price for ULP in the Perth metropolitan area by category of retailer in cpl

	2004	2005	2006	2007 YTD
Supermarket	96.8	109.2	123.3	122.0
Company Controlled/Price Supported	97.1	110.0	124.1	123.1
Distributor Controlled	98.3	112.4	125.7	124.4
Branded Independents	99.4	112.4	126.7	125.0
Independent	102.8	116.0	128.8	126.7
Independent Chain	95.8	109.0	123.1	121.7

As noted previously, ULP prices in the Perth metropolitan area are subject to retail price cycles. The supermarket and independent chain sites are price followers in these cycles.

In December 2006, the independent chain, United Petroleum, commenced a take over of sites that had been previously owned by the supermarket chain Metcash (and prior to that FAL). Since the sites were taken over by United they have become more price competitive. For 2006, the ULP prices for the Metcash/FAL controlled sites were on average 0.33 cpl less than the Perth metropolitan average. For the period 1 January 2007 to 30 June 2007, ULP prices for the same sites under United control were, on average, 3.6 cpl less the Perth metropolitan average.

3.3 Volumes sold during the price cycle

For the period 1 October 2004 to 31 December 2004, a regular 7 day price cycle existed in Perth. For the same period in 2005, there was no price cycle.

Analysis of volume of sales and price data for these two periods, undertaken by Information Management and Marketing, University of Western Australia, concludes that price is not an underlying factor for ULP consumption and that day of the week is the main driver of consumption⁵. The analysis found no meaningful difference in consumption patterns between 2004 (when a price cycle existed) and 2005 (when no cycle existed). Analysis of volumes of sales showed that Thursdays and Fridays are days of highest consumption and Sunday is the lowest, regardless of whether a price cycle exists or not.

Table 7 compares the proportion of total ULP volumes sold by day of the week for the period in 2004 with the corresponding period in 2005.

⁵ Information about the collection and analysis of volume of sales and price data is included in Appendix B.

Table 7: Percentage of total volume of ULP sold in Perth by day of the week

<i>Day of the week</i>	<i>Oct – Dec 2004^a</i>	<i>Oct – Dec 2005^b</i>
	<i>%</i>	<i>%</i>
Monday	14.32	13.65
Tuesday	15.28	14.07
Wednesday	14.76	14.80
Thursday	15.31	15.96
Friday	15.74	16.16
Saturday	13.50	14.33
Sunday	11.09	11.02

a Period with regular 7 day price cycle with cycle starting on Tuesdays

b Period with no regular ULP price cycle.

It is generally claimed that, in aggregate, consumers benefit from price cycles because 60 per cent of sales are below the average price for the cycle. While 60% of sales may be made at a price below the average price for the cycle, this situation provides no relative benefit to consumers. The ratio of sales above and below the average price for the cycle is a construct of the timing and level of the price hike, the rate at which prices are subsequently reduced, and the stable pattern of consumption throughout the week discussed elsewhere in this Submission. For example, high prices in the early part of the cycle raise the overall average price for that cycle and result in greater volumes of sales below this average price. Both the price cycle and the calculation of volume of sales below the average price for the cycle are contrived marketing tools.

A more reliable indicator of relative consumer benefit is a comparison of indicative retail margins (the difference between the average daily retail price and the average daily TGP). Table 8 compares the average daily indicative retail margin for ULP in Perth for two periods of time: 1 October 2004 to 31 December 2004 (when regular price cycles occurred) and 1 October 2005 to 31 December 2005 (when no regular price cycles occurred). The higher average daily indicative retail margin during the 2004 period suggests that no relative benefit is derived for consumers from price cycles.

Table 8: Comparison of indicative retail margins in Perth during a period with regular price cycles and a period with no regular price cycles in cpl

	<i>Oct – Dec 2004^a</i>	<i>Oct – Dec 2005^b</i>
Average Perth retail margin indicator	3.48	3.02

a Period with regular 7 day price cycle with cycle starting on Tuesdays

b Period with no regular ULP price cycle.

3.4 Regional Prices

The volume of sales and the competitiveness of fuel markets have a significant influence on prices. As the Perth fuel market is relatively large, service stations compete aggressively to sell higher volumes of fuel. Larger sales volumes result in lower per unit operating costs, and therefore lower margins can be made on each litre sold. Fuel outlets selling higher volumes also have an advantage over smaller, regional sites, as they are able to obtain better supply deals at a wholesale level (owing to larger volumes purchased) and have lower site operating costs.

The supply chain for the metropolitan fuel retailers is also simpler with the product handled less often, offering a further cost advantage over regional customers. Other factors such as the amount of non-fuel revenue from grocery items also have an impact.

Factors other than distance from a distributor affect regional prices. For example, since 2003 ULP prices in Jurien, which is located 266km from Perth, have been on average 3.4 cpl more expensive than Denmark, which is located 414km from Perth.

Between 2001 and 2007 YTD, the difference in ULP prices between city and country has decreased in 13 of the 21 original regional areas included in the FuelWatch boundaries. This is at a time when Perth prices have fallen relative to Eastern States capital cities.

Table 9: Difference between retail price of ULP in country centres and Perth from 2001 to 2006

<i>country centre</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007 YTD</i>
Albany	12.2	9.4	9.3	9.0	9.1	9.3	7.8
Broome	15.6	14.7	15.1	18.4	19.4	19.9	19.7
Bunbury	7.9	5.0	5.2	7.1	6.6	3.7	2.2
Busselton	7.8	4.3	4.6	7.4	6.7	5.3	4.7
Capel	9.9	6.3	6.6	8.9	9.1	7.7	5.5
Carnarvon	14.5	11.7	11.6	12.9	13.9	13.3	12.7
Collie	10.3	7.9	8.4	11.2	8.5	6.9	7.1
Dampier	14.5	14.4	13.6	17.1	19.8	22.8	21.3
Dardanup	6.0	4.4	4.3	6.9	6.5	3.8	3.1
Esperance	8.2	6.7	6.8	9.5	9.8	11.5	9.6
Geraldton/ Greenough	12.6	11.5	9.5	11.4	12.7	11.9	11.2
Harvey	8.1	5.8	5.5	6.9	7.4	6.6	5.6
Kalgoorlie/ Boulder	12.7	10.6	9.2	10.9	12.8	10.3	7.1
Karratha	16.8	14.7	13.8	17.5	19.6	22.8	21.3
Kununurra	16.6	17.1	17.4	22.8	31.1	32.5	28.3
Mandurah	0.2	0.2	0.0	0.0	0.0	-0.2	0.4
Murray	2.9	2.4	3.4	4.1	3.8	2.6	2.6
Narrogin	8.0	6.5	6.3	7.6	7.6	7.1	7.6
Northam	0.4	2.2	4.0	5.5	6.8	6.5	5.8
Port/South Hedland	15.4	14.4	14.1	16.5	17.3	20.1	20.6
Warooka	6.7	4.7	4.6	5.9	5.5	5.8	4.5

3.5 Correlation between Retail ULP Prices and Terminal Gate Prices

Figure 3 at Appendix A shows the relationship between the average daily retail price and the average daily terminal gate price (TGP) for ULP in Perth between 1 January 2004 and 30 June 2007. The effect of the price cycle mentioned previously is clearly evident. It is also clear that the day-to-day price movements due to the price cycle are not associated with changes in TGPs.

Despite the presence of the price cycle, there is a strong relationship between the average daily retail price and the average TGP for ULP in Perth. Figure 4 at Appendix A plots the average daily retail price against the average daily TGP for ULP in Perth and clearly demonstrates this linear relationship. The calculated coefficient of correlation is 0.987, which confirms the strength of the relationship.

Despite the overall strong relationship between average daily retail prices and average daily TGPs, there are occasionally periods of divergence. This is demonstrated in the Figure 5 at Appendix A, which illustrates the difference between the average daily retail ULP price and the average daily TGP for ULP in Perth.

The periods of divergence between retail prices and TGPs in January 2007 and June 2007 are highlighted in Figure 5. During both periods, a rapid decrease in the TGP coincided with the start of a new price cycle. In both cases, a subsequent departure from the normal 14-day ULP price cycle in Perth was observed with a 27-day cycle occurring between 2 January 2007 and 28 January 2007, and a 21-day cycle occurring between 28 May 2007 and 17 June 2007. Similar periods of decreasing TGPs in August 2006 did not result in a divergence with the average retail price.

4. Terminal Gate Prices

TGP arrangements for Western Australia were introduced on 19 December 2002, to increase price transparency in the wholesale fuel market and provide access for eligible distributors and retailers to purchase petroleum products directly from the terminal at competitive prices. The TGP system in WA is modelled on the Victorian system.

Terminal gate prices in Western Australia are set by the declared terminal operators. Prescribed⁶ suppliers are required to nominate a Terminal Gate Price for each controlled petroleum product (ULP, PULP and Diesel) supplied by them from a Declared Terminal⁷.

Prescribed suppliers must notify the Prices Commissioner of the next day's TGP⁸ for each of the controlled petroleum products it supplies from each declared terminal via direct upload to the FuelWatch website by 2pm on any day. The TGP is the maximum price that the controlled petroleum products can be sold at, from 8.30am on the following day.

In addition to the requirement to notify terminal gate prices, terminal operators are required to notify the Prices Commissioner about the components that make up this price. The components include a cost for the landed price of the product (based on import parity pricing principles), freight to the relevant terminal, a quality premium, wharfage and insurance costs, a margin for the cost of operating the terminal, and taxes such as GST and excise. The TGP also allows the supplier to include costs for "other" items such as branding that can be charged on top of the TGP.

Through this mechanism, the Government is able to monitor variations in components between companies, however the information is not published. This aspect of the TGP approach used in WA differs from that in Victoria where oil majors are required to publish their TGP on their own corporate websites and need not submit the components that make up the price.

The Commonwealth Government's Oilcode, implemented in 2007, imposes similar TGP arrangements to those in Victoria on all States.

⁶ Suppliers are prescribed under the *Petroleum Products Pricing (Declared Terminals) Order 2004*.

⁷ Terminals are declared under the *Petroleum Products Pricing (Declared Terminals) Order 2004*.

⁸ After the first TGP notification, further TGP notifications are only required when a TGP changes. When the TGP does not change, the previously notified TGP will automatically be "rolled" over to the next day (and each subsequent day) until the supplier notifies a new TGP

4.1 Components

Under the Terminal Gate Price Order, the TGP must be determined by an oil company in accordance with the following formula:

$$\text{LIPP} + \text{TOM} + \text{EXE} + \text{ANY OTHER AMOUNTS} + \text{GST}$$

Where

- EXE** is excise duty payable;
- TOM** Terminal Operating Margin is a reasonable return to the supplier on the cost of establishment and operation of the terminal from which the petroleum product is supplied;
- GST** is goods and services tax; and
- LIPP** is the actual amount paid for the petroleum product imported into WA; or $\text{PSPASP} + \text{P} + \text{F} + \text{I} + \text{W}$;

and

- PSPASP** is the Platts Singapore Products Assessment (Spot) Price for the refined Singapore product; or the Platts Singapore Products Assessment (Spot) Price that most closely resembles the product adjusting by a premium or discount as the case may be;
- P** is reasonable premium amount for the petroleum product in order for it to comply with clean fuel legislation;
- F** is freight costs of the petroleum product to the terminal from which it is supplied;
- I** is insurance and loss based on a reasonable percentage of the total value of the product plus freight; and
- W** is wharfage charges payable by the supplier to the relevant port authority where the petroleum is sold.

4.2 Benchmark Price for Unleaded Petroleum

The Singapore Mogas 95 is used as the benchmark for the PSPASP component of the TGP for ULP. In order to average out periodic spikes and troughs in the price of this product, when monitoring prices the Department uses a seven day rolling average, calculated using the 2nd last day before the day on which the fuel is sold at a controlled terminal as the 7th and final figure in the calculation. This provides for a 48-hour delay before any severe spikes are factored into calculations.

The average of TGPs notified for the Perth metropolitan area closely follows the rolling average of Singapore Mogas 95 prices. Figure 6 at Appendix A, which plots the average TGP for ULP in the Perth metropolitan area against the seven day rolling average of Singapore Mogas 95 since December 2002 shows this strong linear relationship. The calculated coefficient of correlation is 0.997, confirming the strength of the relationship.

Figure 7 at Appendix A plots both the average of TGPs notified for the Perth metropolitan area and the seven day rolling average of Singapore Mogs 95 over time. The graph demonstrates that the relationship has been relatively constant over time.

Figure 8 at Appendix A shows that the gap between the average daily TGP for ULP in Perth and the seven day rolling average of Singapore Mogas 95 is not affected by the direction of change in the price of Singapore Mogas 95. The graph provides evidence that increases and decreases in Singapore Mogas prices are reflected at the same rate in the TGPs.

4.3 Use of Singapore Mogas 95 as a benchmark

The reasons for the use of Singapore Mogas 95 appear historical. Following a review in 1995, Singapore Mogas 95 was used by the former Prices Surveillance Authority as the base for the gasoline intervention price for Australian 96 RON leaded and Australian ULP 91RON. Although the mix of gasoline grades sold has changed since 1995, Mogas 95 continues to be used.

The Department has received advice from Mr Costa Tsesmelis, Director/Principal Consultant from Protos Consulting International, that the use of Singapore Mogas 95 as the price benchmark for ULP 91 RON should be reviewed.

In his advice, Mr Tsesmelis advocates using Mogas 92 as the benchmark for ULP 91RON, Mogas 95 as the benchmark for PULP 95RON and Mogas 97 for 98RON. Realigning to these benchmarks would provide more accurate indication of costs, and a better indication of the quality premiums applied to the price of each grade of fuel. This change in benchmark also would help to eliminate distortions in the ULP 91RON price as the expected increase in the demand for higher octane fuels leads to a greater price difference between Mogas 92, Mogas 95 and Mogas 97.

This proposal by Mr Tsesmelis is supported by the Department. The use of appropriate benchmarks for different grades of petrol sold in Australia will lead to greater price transparency particularly in the medium term as the consumption of higher octane fuels increases.

5. Retail and Wholesale Margins for Unleaded Petroleum

5.1 Retail Margins

The difference between the average daily retail price and an average of relevant TGPs is used to provide an indication of the level of retail margins in the marketplace. Competitive dynamics between fuel retail companies can occasionally lead to periods when retail margins appear to be below the point at which fuel retail companies are recouping their costs. Furthermore, at most other times, when competition is less intense, the margins are higher.

Use of TGPs for this purpose will result in an under-estimation of retail margins. Nevertheless, this calculation allows the tracking of relative levels of retail margins over time.

Table 10 below shows that the average indicative retail margin for ULP has decreased by 0.5 cpl since 2003. The entry of Coles Express into the market in March 2004 triggered a reduction in retail margins from an average of 4.3 cpl in 2003 to 1.9 cpl in 2005. Retail margins have increased since that time.

Table 10: Average annual indicative retail margins for ULP from 2003 to 2007 in cpl

	2003	2004	2005	2006	2007 YTD
average retail margin	4.3	2.4	1.9	3.5	3.8

* average is the metro average minus the average metro TGP

Figure 9 in Appendix A shows that indicative retail margins for ULP have fluctuated over the four and a half year period between 2003 and 2007 YTD. Two periods of low retail margins are evident from March to August in 2004 and January to August in 2005. It is likely that the drop in retail margins between March and August 2004 can be attributed to the entry of Coles Express into the WA fuel retail industry in early 2004. At that time, the entry of supermarkets stimulated competition in the metropolitan fuel market with many of the other brands reducing their prices to compete with the supermarkets. Petrol prices for supermarket brands were also extremely competitive over a similar period the following year. In response to the supermarket's "discount" pricing and strong marketing of their "shopper docket" schemes, it appears other brands dropped their retail prices to remain competitive.

In early September 2005, following Hurricane Katrina, retail margins for all companies increased markedly. Initially this was the result of a significant overnight increase in the Singapore benchmark price followed by a rapid decrease in the benchmark price. But as the benchmark price started to decrease, fuel retail companies did not decrease their retail prices to the same extent. This led to higher margins over the period from September to October 2005. Indicative retail margins for 2007 YTD have been slightly higher than 2006. The periods of divergence in January 2007 and June 2007 discussed previously have corresponded to periods of higher retail margins.

As noted previously, Perth retail prices have followed a predominantly 14 day price cycle since January 2006. As a result of this pricing cycle, retail margins fluctuate daily. Margins typically reach a peak of between 6 and 10 cpl early in the price cycle and decrease to a minimum of between -2 and 2 cpl at the end of the cycle. Figure 5 at Appendix A shows these daily variations in margins.

5.2 Wholesale Margins

Indicative wholesale margins are calculated by subtracting an estimated wholesale cost figure from each company's TGP. The calculation provides an indication of wholesale margins, rather than an exact figure.

The estimated wholesale cost figure is the sum of the Singapore Mogas 95 seven day rolling average, excise, GST, freight, quality premiums, insurance, loss and wharfage. The freight, quality premiums, insurance, loss and wharfage figures are reported as components of the TGP.

Table 11 below shows that average annual indicative wholesale margins for ULP, calculated as described above, have increased significantly (44%) since 2003.

Table 11: Average annual indicative wholesale margins for ULP from 2003 to 2007 in cpl

	2003	2004	2005	2006	2007 YTD
average wholesale margin	4.1	4.6	5.3	5.5	5.9

*average is the metro average TGP minus the estimated wholesale cost figure

Figure 11 at Appendix A shows movements in the average monthly indicative wholesale margins since 2003. The long term trend of increases in wholesale margins is illustrated. The graph also illustrates a seasonal pattern, with average monthly wholesale margins regularly decreasing during June and July.

6. Effects of Regulation

The fuel market in Western Australia is regulated by the PPP Act and associated Regulations and Orders.

Regulation of fuel prices under the PPP Act currently applies to the Perth metropolitan area and 52 local government areas throughout WA. There currently are 584 service stations within the FuelWatch boundaries: 303 metropolitan sites and 281 regional sites. The PPP Act applies to approximately 80 percent of fuel retailers in the State.

6.1 "24 hour rule"

The PPP Act requires fuel retailers within the FuelWatch regulation areas to notify the Prices Commissioner about their next day's fuel prices for ULP, PULP, Diesel, LPG, Ron 98 and biodiesel blends on a daily basis by 2pm. Retailers must charge these notified prices from 6am the next day for 24 hours. Fuelwatch currently receives over 1000 price notifications per day.

As a result of the FuelWatch system, the Western Australian retail fuel market is free from the intra-daily price fluctuations that occur in other Australian capitals and that used to occur in Perth. The system allows WA motorists to be informed about fuel prices for the following day at service stations across the State, and to be assured that the prices will remain constant throughout the day. WA is the only State in which the Government and motorists have access to such comprehensive information about fuel prices.

Prices for the following day are made publicly available on the FuelWatch website and via an automated telephone service after 2.30pm, enabling consumers to plan their purchases and to buy at the cheapest price in their area. With information about the cheapest prices being made available through FuelWatch and the media, retailers are encouraged to offer lower prices in order to gain sales.

Under the TGP Order, operators of declared terminals also are required to notify the Prices Commissioner about their wholesale terminal gate prices by 2pm the day before they want to change their prices. These prices also are published on the FuelWatch website after 2.30 pm, leading to increased price transparency at the wholesale level of the market. Retailers and distributors can use this information to help negotiate better wholesale prices.

6.2 Price Boards in Regional Areas

Within the regional areas regulated under the PPP Act, retailers are required to display price boards showing the price of ULP, LPG and one other fuel product. This requirement was introduced through an amendment to the PPP Act, following a successful trial of price boards in the regional town of Albany. The price of ULP in Albany decreased on average by 2 cpl during the three months following the introduction of price boards.

When the amendments were made to introduce mandatory price boards, the Perth metropolitan area was not included. In the more competitive metropolitan retail market, nearly all sites were already using price boards.

6.3 Ensuring Compliance

The Department has a Monitoring and Compliance program with both proactive and reactive elements. The program is designed to ensure that wholesale terminals and retail sites comply with the legislation.

A Monitoring and Compliance Officer carries out regular terminal inspections and routine patrols of retail sites, and also investigates consumer complaints. All metropolitan retail sites are checked twice per year to ensure compliance with the PPP Act and associated Regulations. In addition, declared terminals are inspected each month.

During the 2006-07 financial year, 144 complaints were received from motorists regarding retail sites selling fuel at other than the notified price. Each alleged breach of the regulation is investigated and, when appropriate, sanctions are imposed.

The level of compliance with FuelWatch requirements is found to be high amongst traders, indicating both ability and willingness to comply with the regulation. A *Retailer's Guide* to requirements under the PPP Act and associated regulations has been distributed to fuel retailers, and ongoing information and advice is provided to ensure that retailers are familiar with the requirements and to encourage compliance.

6.4 Public Acceptance

WA motorists have embraced the FuelWatch system and are using it to save on fuel purchases.

- More than 160,000 visitors on average per month to the FuelWatch website during 2007.
- 28,000 emails are sent to FuelWatch subscribers daily.

- The number of subscribers has increased four fold since 2002 to over 29,000 in June 2007.
- More than 1,800 calls made to the automatic FuelWatch telephone service per month.

An independent survey found that:

- 95% of respondents were aware of the FuelWatch service;
- 86% of respondents reported using the service; and
- Respondents who used FuelWatch reported saving \$2 per week, equating to tens of millions of dollars per year.

A difference of 1 cpl at the bowser equates to savings of about \$16 million per year for WA motorists. For 2007 YTD, the average of the cheapest 100 sites in Perth has been 4.4 cpl less than the average of the 100 most expensive sites. WA motorists can use the FuelWatch service to ensure they purchase at the cheapest sites.

6.5 Perth vs Eastern States Prices for ULP

Since establishment of the FuelWatch system, there have been substantial changes in prices for ULP in Perth relative to Eastern States capitals. Table 13 shows the average prices for ULP in Perth and Eastern States capitals since 2003.

During 2003 in Perth, the average price of ULP was 1.3 cpl higher than Adelaide, Brisbane, Melbourne and Sydney combined.

However, since 2004 in the Perth metropolitan area, the average yearly price of ULP has been between 0.4 and 1.5 cpl lower than the combined average for Adelaide, Brisbane, Melbourne and Sydney for each year. This is shown in Table 13 which shows the average difference in ULP prices between Perth and Eastern States capitals since 2003.

The Eastern States prices used for Tables 12 and 13 do not include information for all sites and smaller independent sites are not included. The information for Perth incorporates information from all sites including smaller independent sites. Because these sites generally have higher prices, it is almost certain the Eastern States prices are understated by up to 0.6 cpl compared to Perth prices.

Table 12: Average ULP Prices for Perth and the Eastern States in cpl

<i>year</i>	<i>capital cities</i>				
	<i>Perth</i>	<i>Adelaide</i>	<i>Brisbane^a</i>	<i>Melbourne^b</i>	<i>Sydney</i>
2003	91.7	91.1	91.0	89.4	90.4
2004	97.6	98.8	99.5	97.5	98.3
2005	110.4	112.8	111.8	111.0	111.9
2006	124.3	125.0	126.8	125.8	125.08
2007 YTD	123.0	122.2	125.2	123.2	122.8

a excluding 8.354 cents per litre subsidy

b excluding 0.43 cents per litre subsidy

Table 13: Average difference in ULP prices between Perth and the Eastern States in cpl

<i>year</i>	<i>capital cities</i>				
	<i>Adelaide</i>	<i>Brisbane^a</i>	<i>Melbourne^b</i>	<i>Sydney</i>	<i>Average</i>
2003	-0.6	-0.8	-2.3	-1.4	-1.3
2004	+1.3	+1.9	-0.1	+0.7	+0.9
2005	+2.4	+1.4	+0.6	+1.5	+1.5
2006	+0.7	+2.4	+1.4	+0.7	+1.3
2007 YTD	-0.8	+2.2	+0.2	-0.2	+0.4

a excluding 8.354 cents per litre subsidy

b excluding 0.43 cents per litre subsidy

As mentioned previously, Perth prices are also less variable than those in the Eastern States. Price cycles in Perth are predominately 14 days compared with the 7 days in the Eastern States and the introduction of the 24 hour rule has eliminated intraday fluctuations.

Informal feedback from oil companies has confirmed that the FuelWatch program has had a positive impact on fuel prices in WA. One oil company has indicated that it pays more attention to pricing issues in WA than in any other State. Another stated, off the record, that the FuelWatch service has delivered cheaper prices for WA motorists.

The fact that Perth's prices have been lower than each of the other capital cities on average since 2004 is a testament to this, as there is no known structural or other reason why this should be the case. In fact, the reverse should be true, as Perth is a smaller market than Brisbane, Sydney and Melbourne.

Figure 1: Average monthly prices for ULP in Perth from 1 January 2001 to 30 June 2007

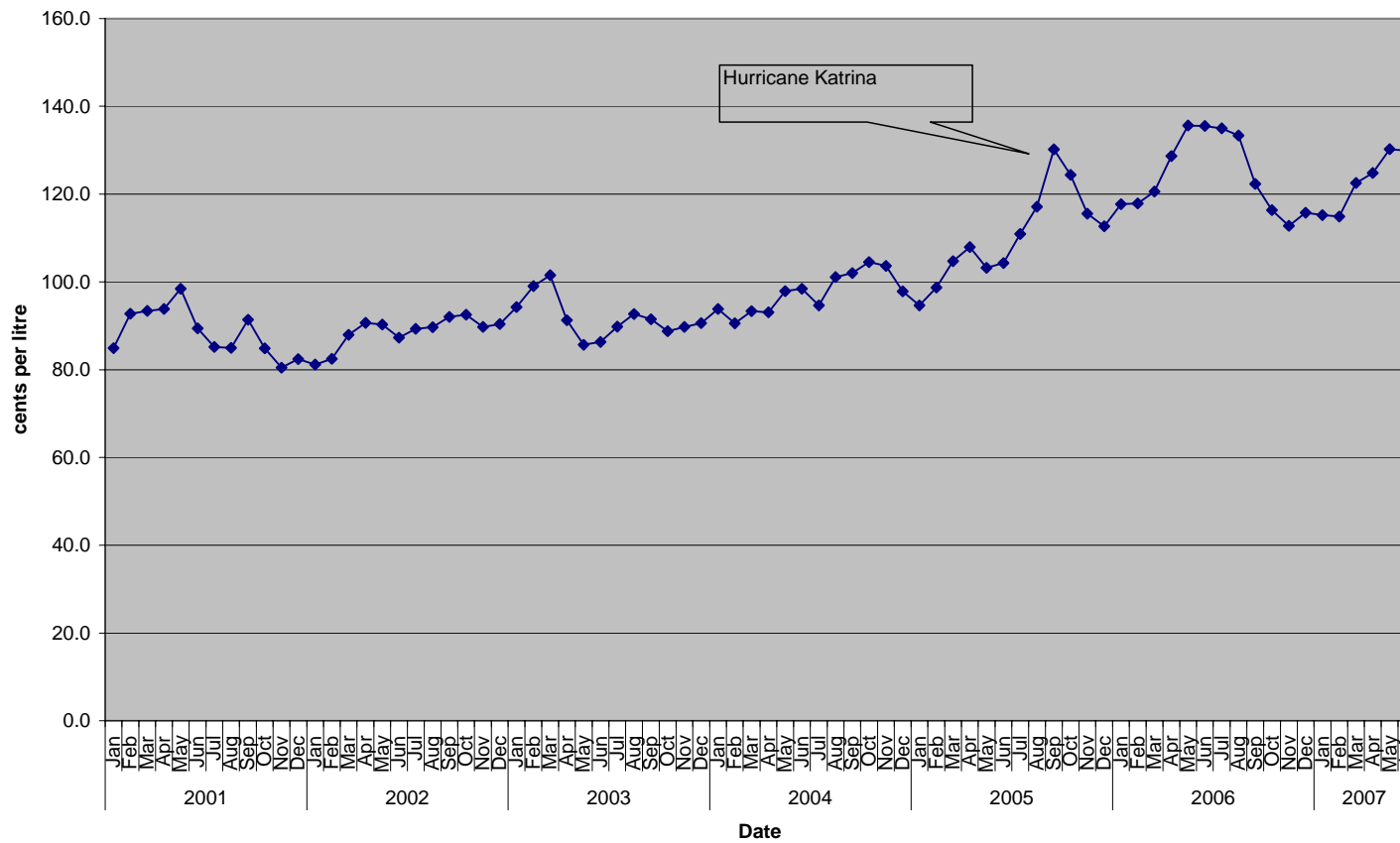


Figure 2: Average monthly difference in prices for ULP between Perth and selected country centres from 2003 to 2007

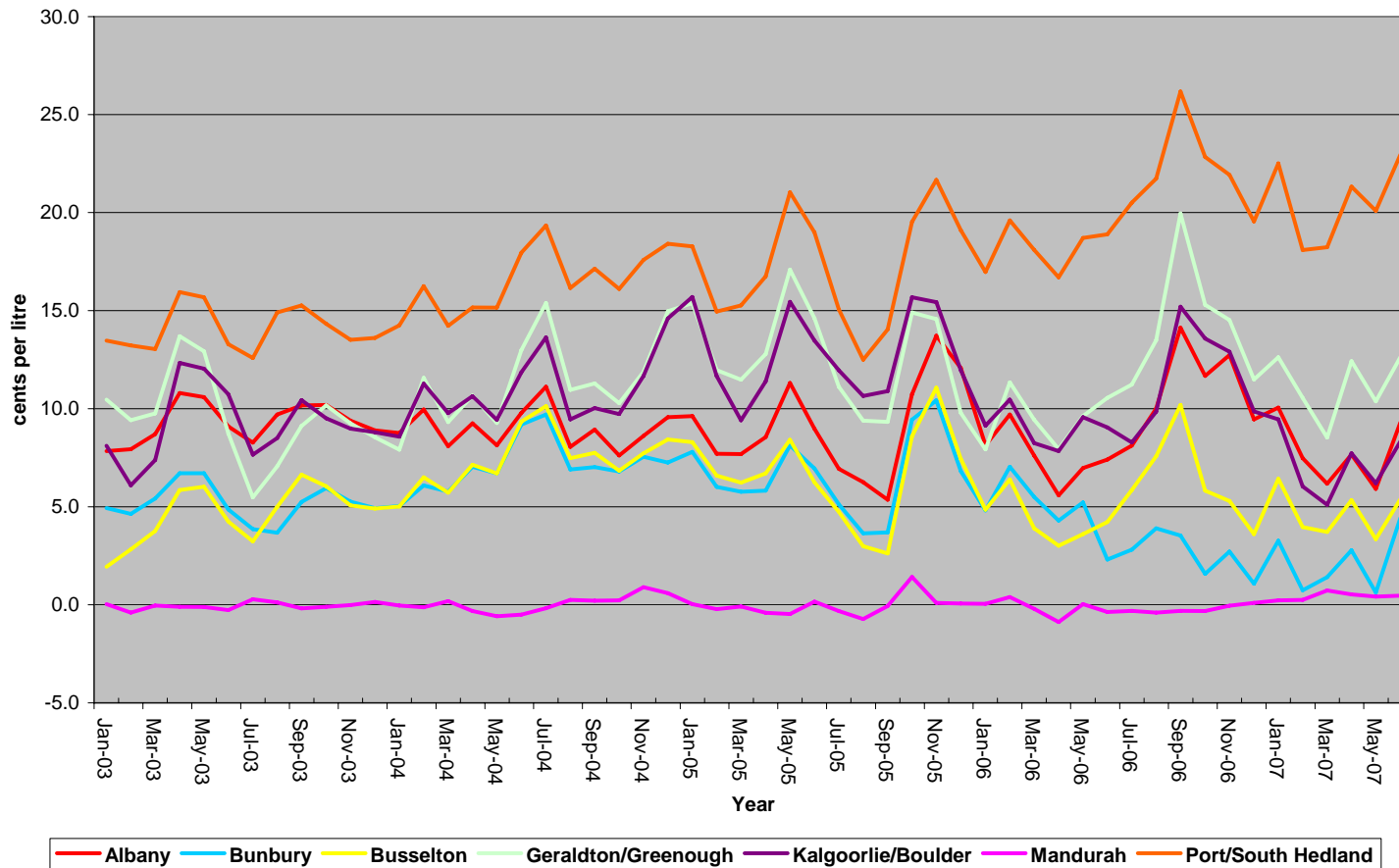


Figure 3: Relationship between average daily retail prices and average daily TGPs for ULP in Perth from 2004 to 2007

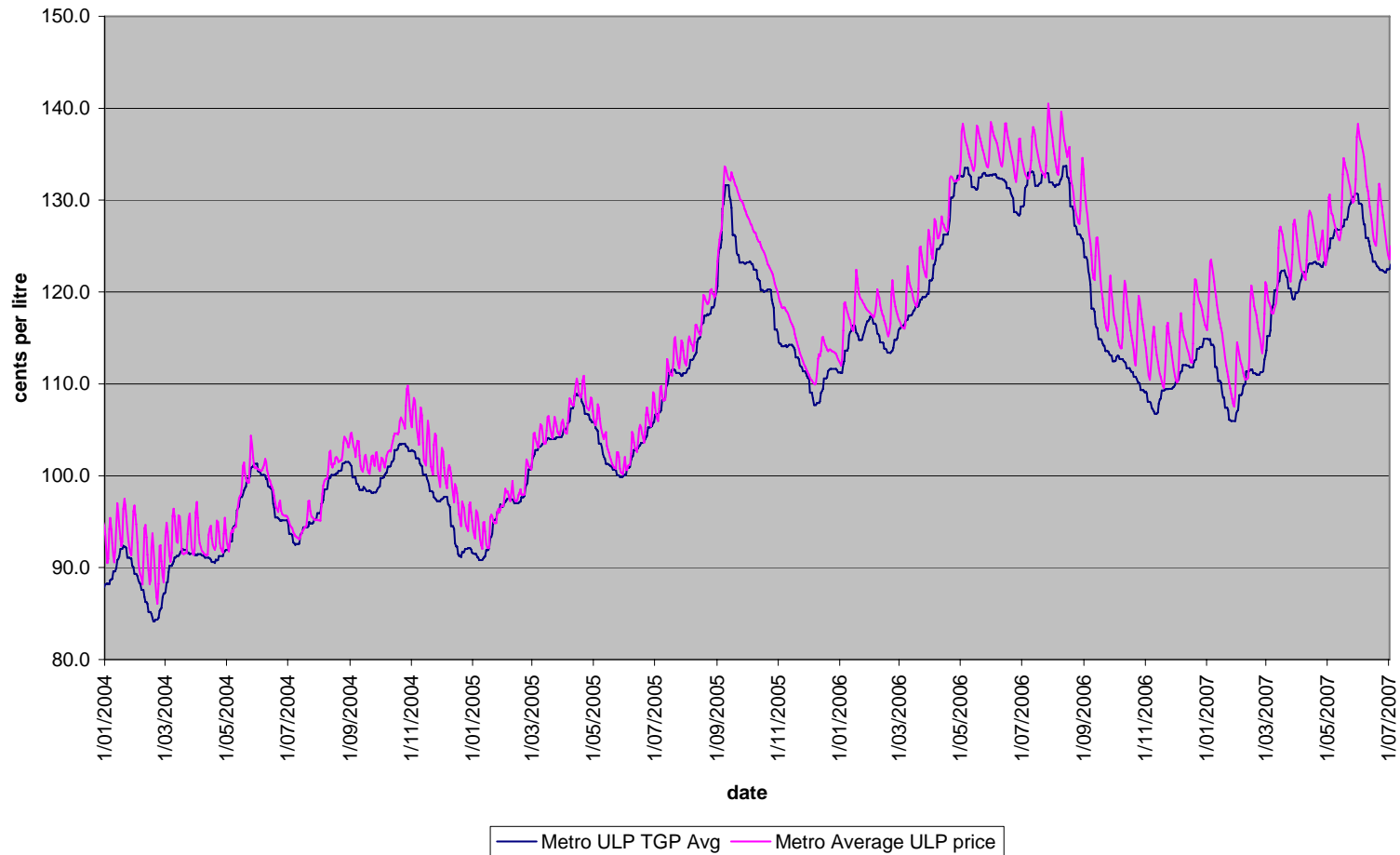


Figure 4: Correlation between average daily retail prices and average daily TGPs for ULP in Perth from 1 January 2003 to 30 June 2007

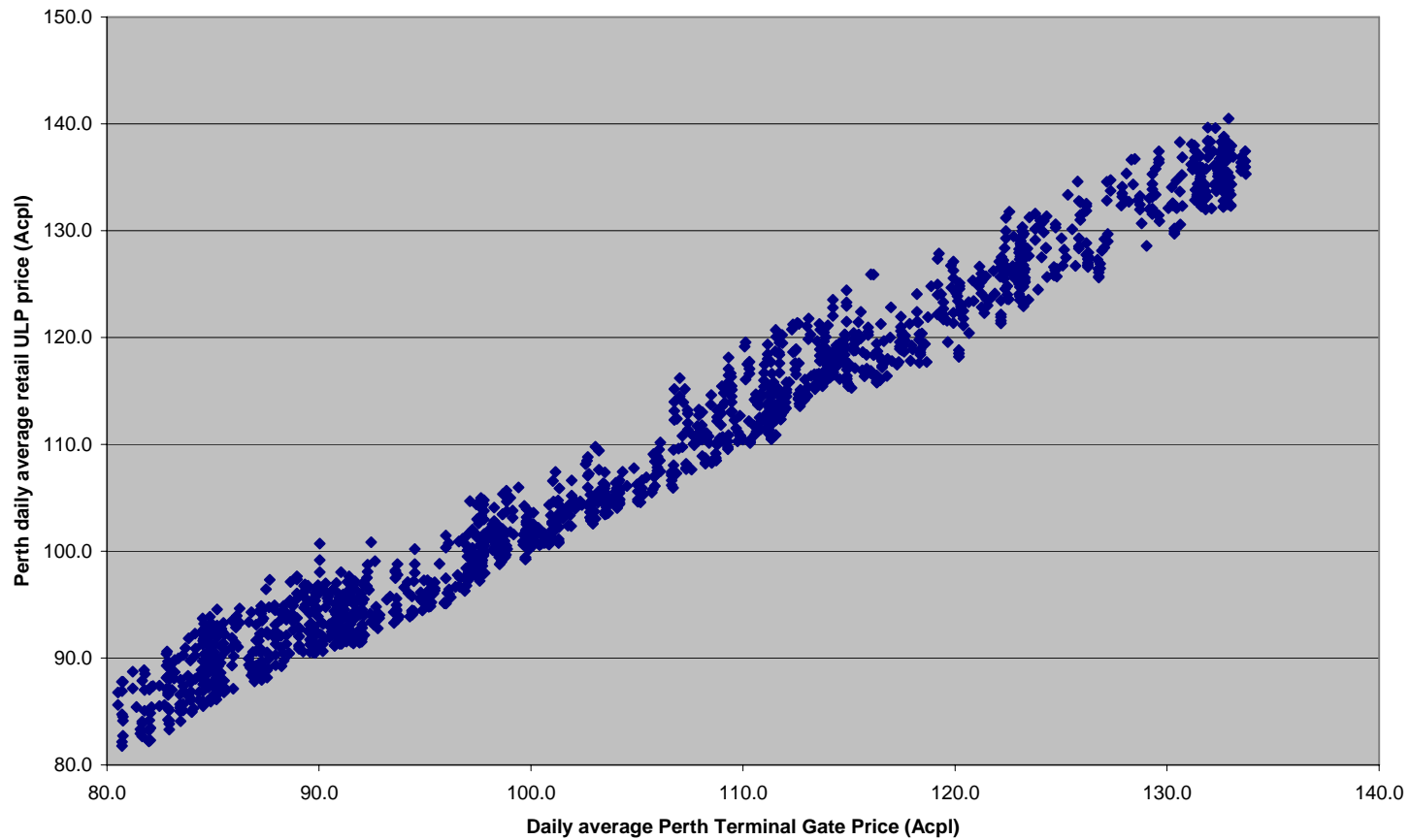


Figure 5: Difference between average daily retail prices and average daily TGPs for ULP in Perth from 1 January 2006 to 1 July 2007

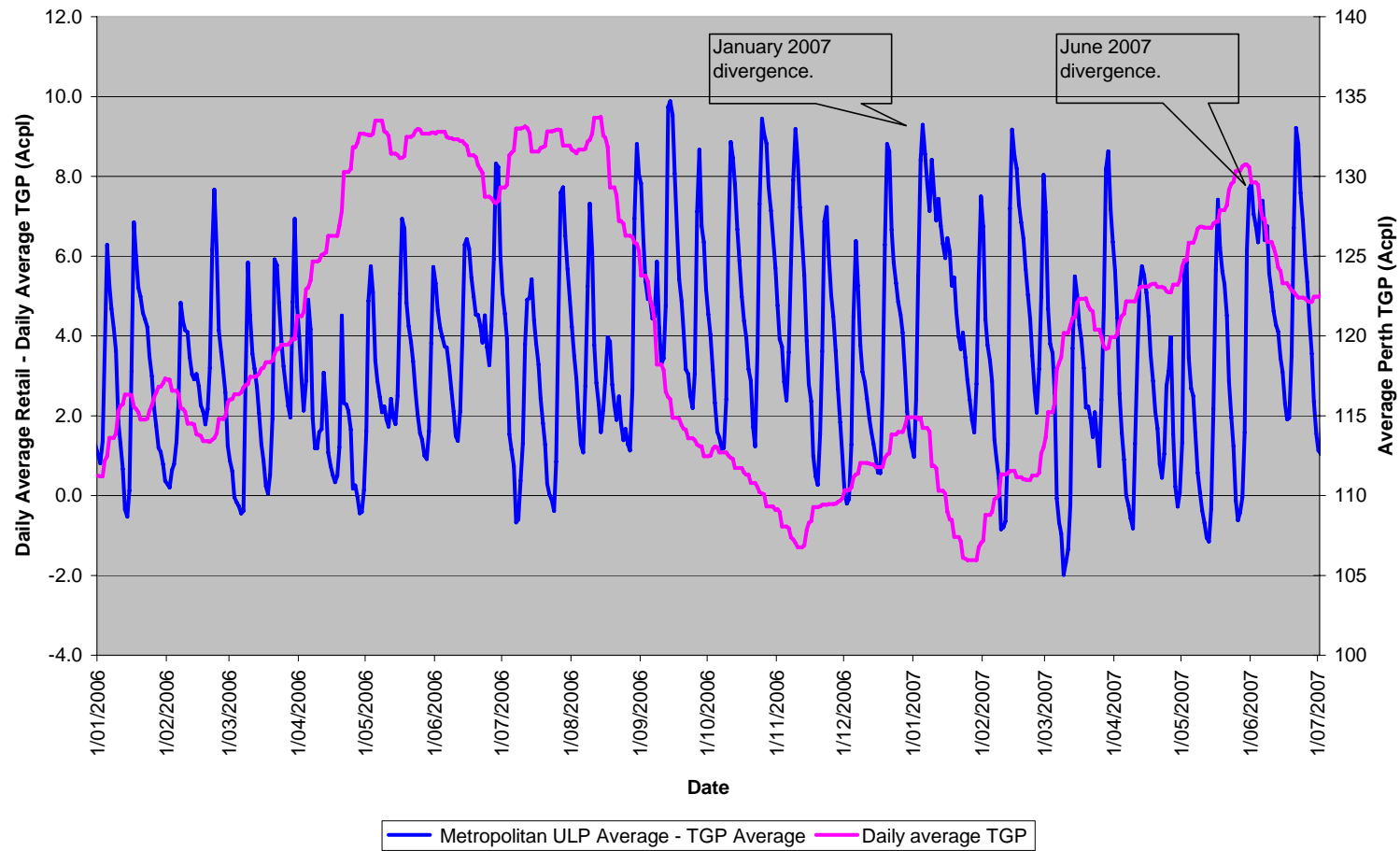


Figure 6: Correlation of rolling average of Singapore Mogas 95 with average daily TGP for ULP in Perth from 2003 to 2007

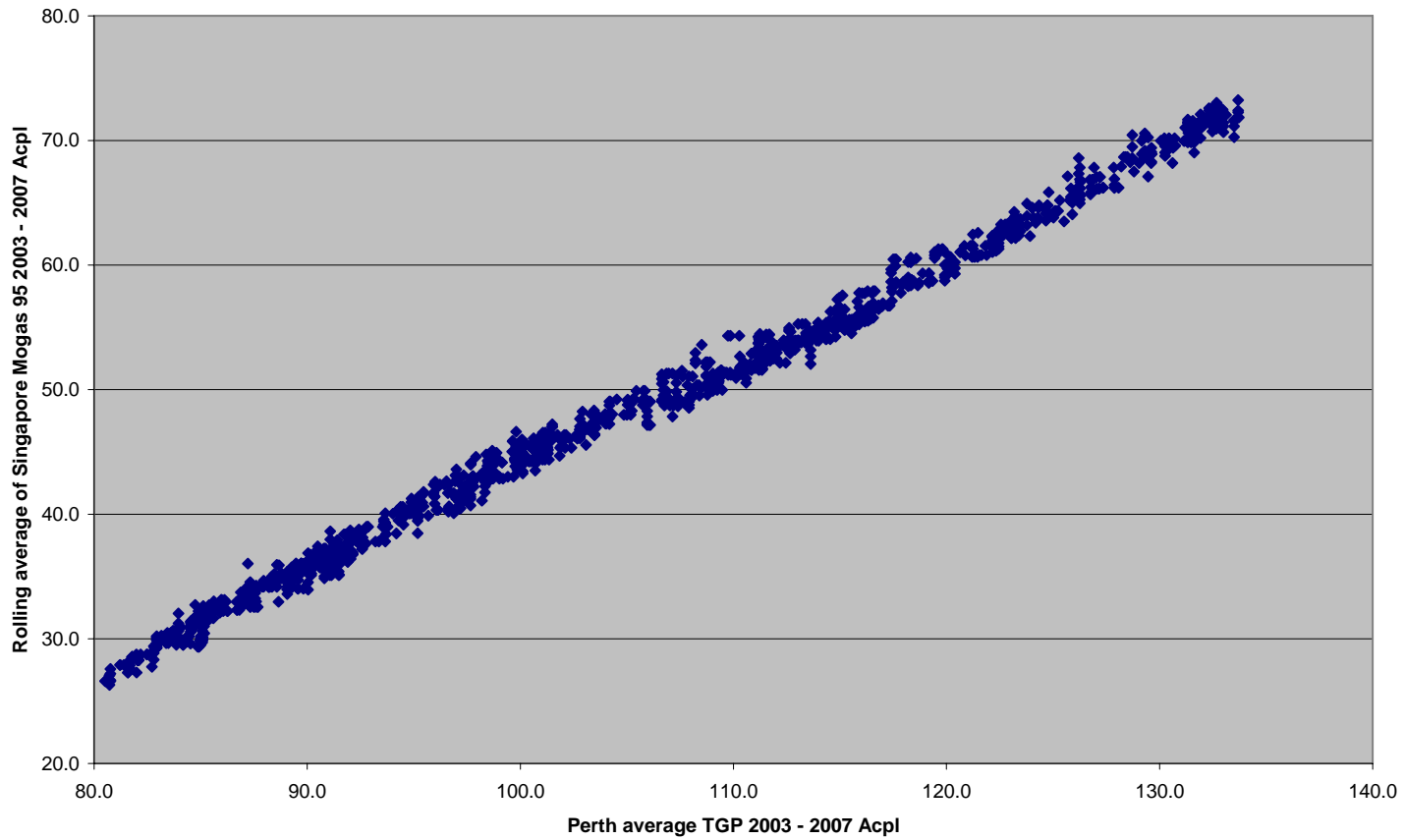


Figure 7: Rolling average of Singapore Mogas 95 and average monthly TGP for ULP in Perth from 2003 to 2007

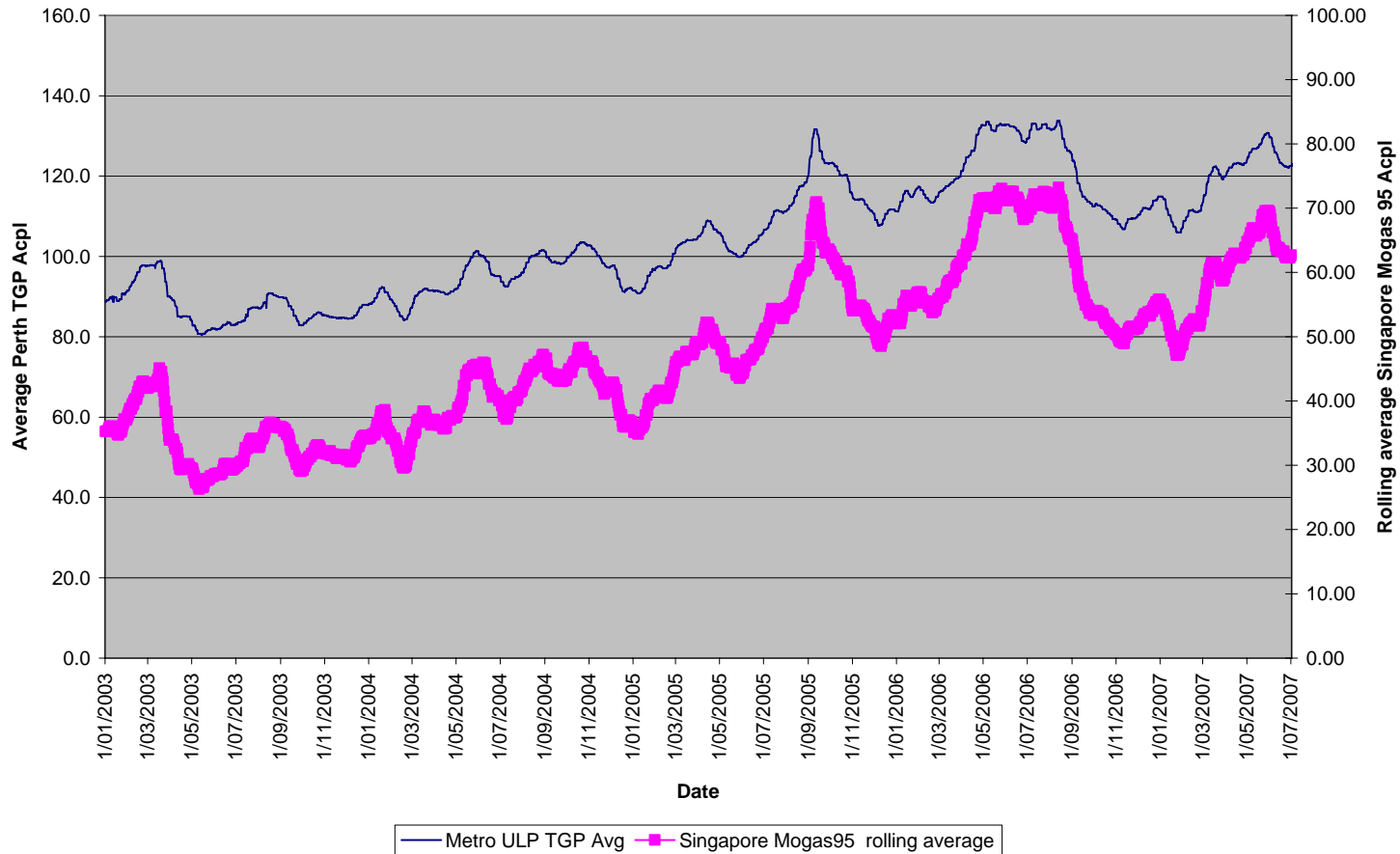


Figure 8: Gap between average daily TGP for ULP in Perth and rolling average of Singapore Mogas 95, mapped against rolling average of Singapore Mogas 95

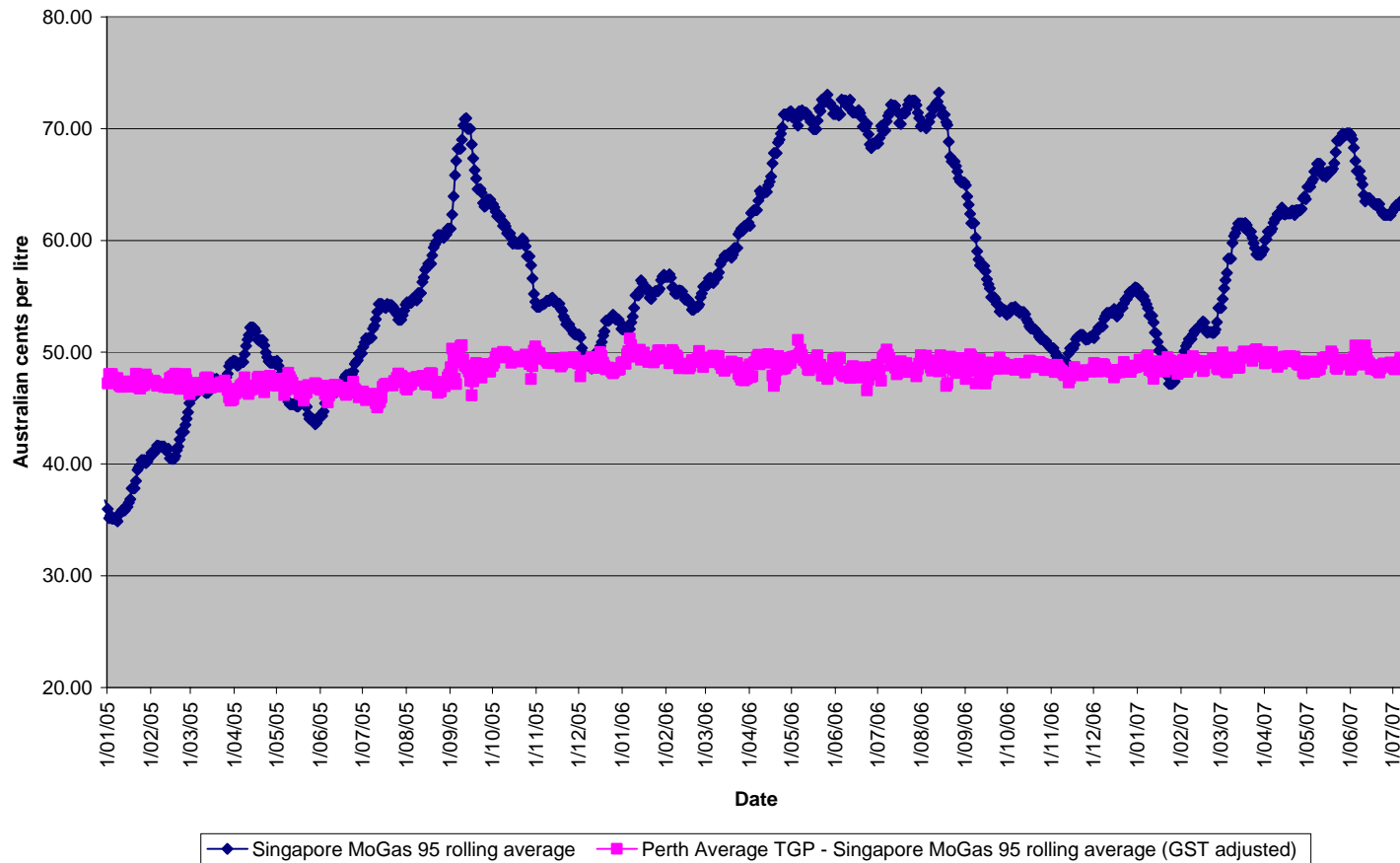


Figure 9: Average monthly indicative retail margin for ULP in Perth from 2003 to 2007

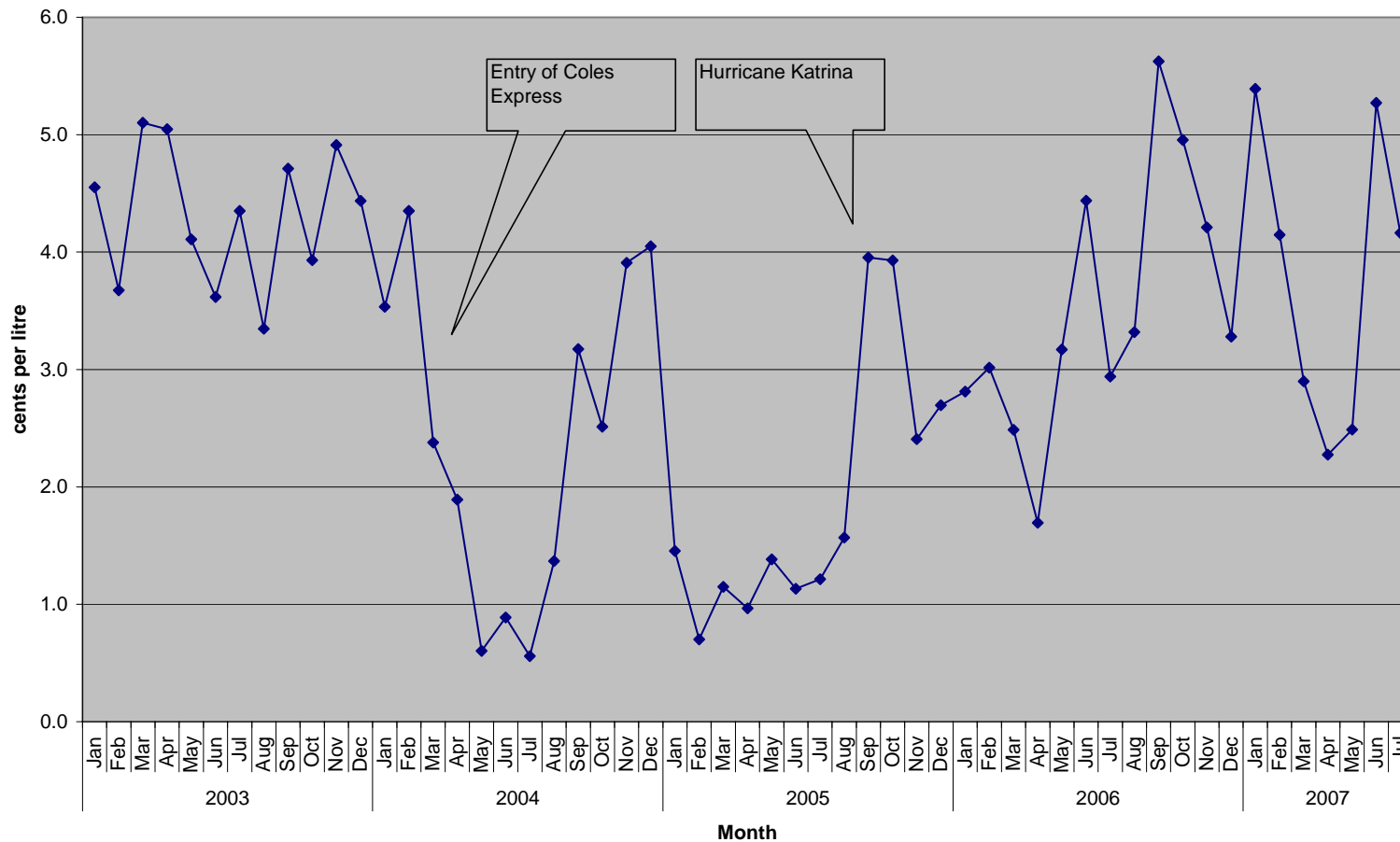


Figure 10: Average monthly indicative wholesale margin for ULP in Perth from 2003 to 2007

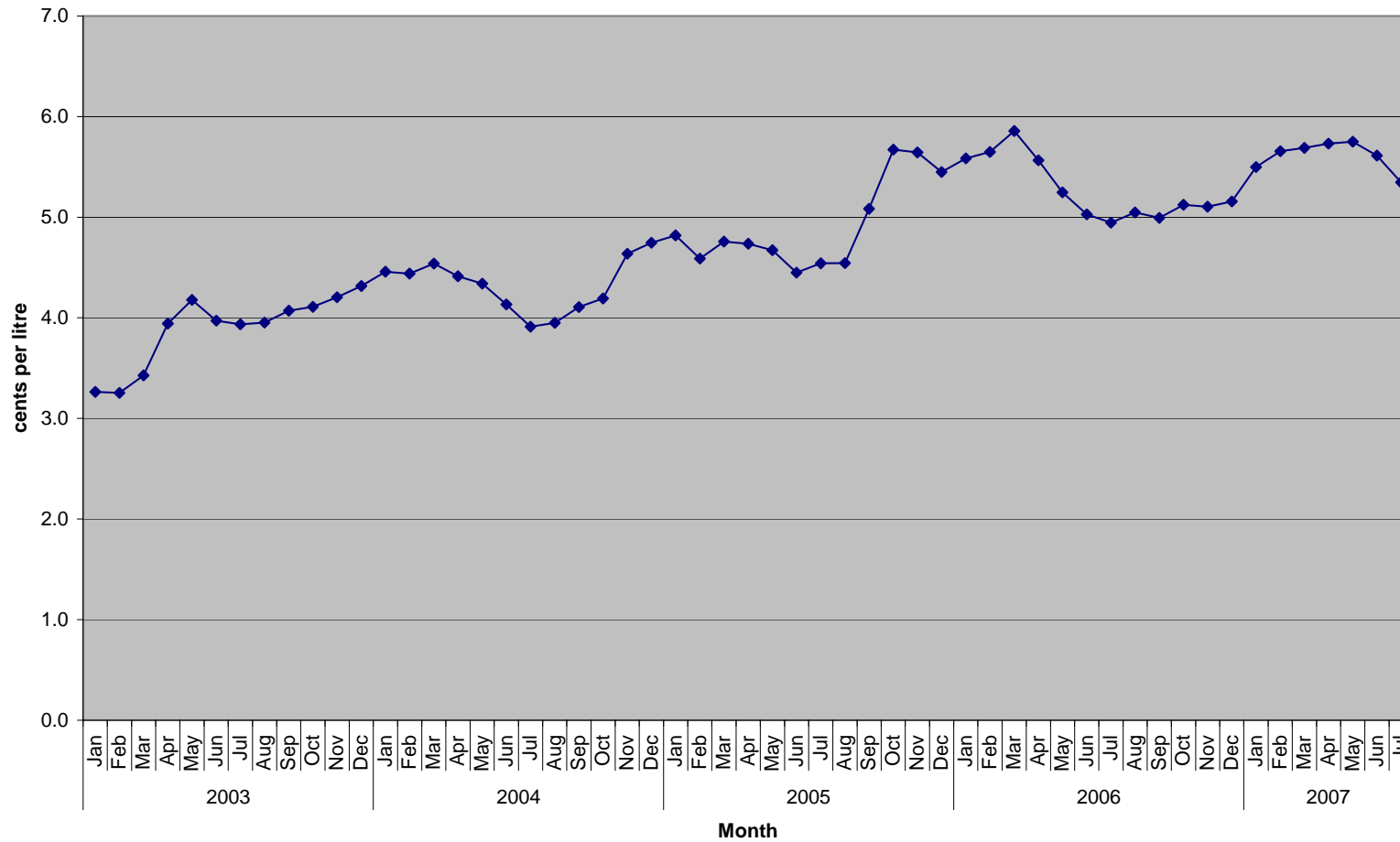
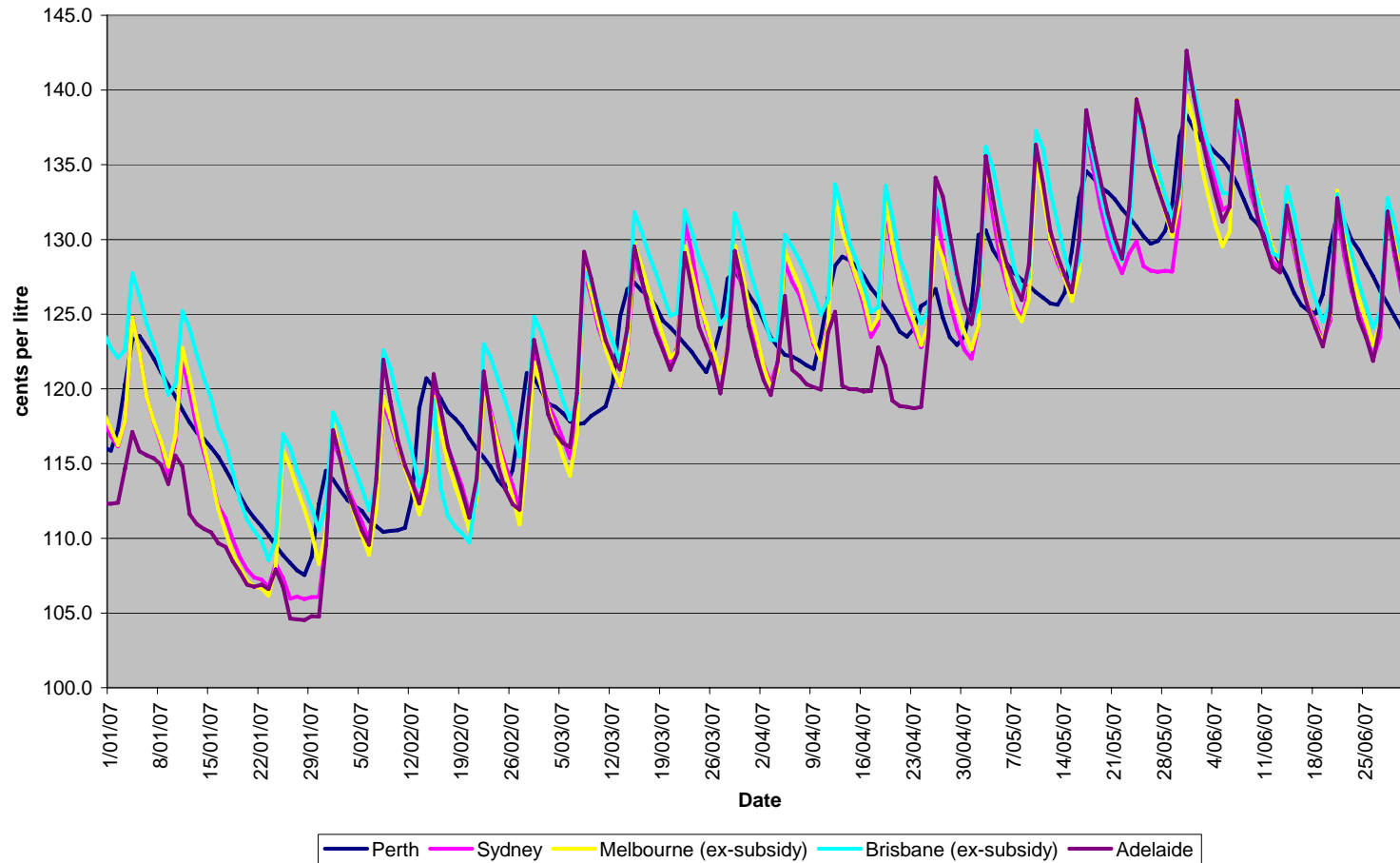


Figure 11: Price cycles in Perth and Eastern States capital cities from 1 January 2007 to 30 June 2007



Analysis of Volume Sales and Price Data Project

Fuelwatch does not routinely collect data about volume of sales. However, under legal notice, the Prices Commissioner obtained data about volume of sales from retail sites in the Perth Metropolitan and Mandurah areas. The scope of the project was limited to retail sites controlled by the major fuel retailers in the Perth metropolitan and Mandurah areas. Data for ULP, PULP, diesel and LPG autogas for the period 1 January 2004 to 31 December 2005 were requested.

Analysis of six months of data, for the last quarters of 2004 and 2005 was undertaken. It was envisaged that analysis of these data would be sufficient to reach valid conclusions. The time periods selected had the added advantage of representing one quarter in 2004 during which regular price cycles were evident, and one quarter during 2005 during which there were no price hikes for the first two months.

The volume of sales and price data were analysed by independent consultants, Acil Tasman, and a report of their findings was provided to the Prices Commissioner. The data and some of the key findings were reviewed by Mr Costa Tsesmelis, Director/Principal Consultant from Protos Consulting International, who provided verbal advice to the Prices Commissioner. The data and some of the key findings also were reviewed by Mr Alvin Lee and Professor Richard Mizerski of Information Management and Marketing at the University of Western Australia. Information about volume of sales provided in this Submission is based on analyses of the volume of sales and price data undertaken by FuelWatch staff, and by these three independent consultants as noted in the text.