ACCC inquiry into retail electricity supply and pricing

Issues Paper

Submission by A. Hughes

Issue 2 Anti-competitive actions

When SA had the blackout, both gas powered generators were on planned maintenance at the same time. This highlighted anticompetitive behaviour by the generators reduced the power available to force the retailers to pay higher prices.

Similarly for retailers there should be penalties for incorrectly estimating the available power for the next wholesale billing period. The value of the penalty should be as a proportion of the advertised price when the error is greater than +/- 10 %

Issue 3 Customer interaction and the market.

The industry is trying to hide the real costs by pricing in very small quantities of money.

1. **Fixed charges**

For example pricing retailers are pricing their fixed charges in cents/day instead of **dollars/year**. The vast majority of customers are connected to the grid for at least a year. If they leave early then a refund calculated on

$$Refund(\$) = \frac{price\ x\ number\ of\ disconnected\ days}{365.2422}$$

100 cent/day = $365.24 per year which looks and sounds a lot more thus magnifying the difference in prices between retailers. For example 110 cent/day is $36.52 more.

All fixed charges must be quoted for a year to allow like for like comparisons.

Recommendation: Price all fixed charges by all retailers are to be in $ per year with proportional refunds if the account is closed on any

other day other than the birthday of the commencement of the account.

2. **Consumption charges**
    a. Electricity is priced in cent/kWh which is a very small unit of energy. Like the cent/day charge is makes variations in price between retailers appear much smaller.
    b. Comparison with other sources of energy is difficult when gas is sold in MegaJoule and bottled gas in litres.

    To overcome both of the above problems all gas and electricity should be priced in $/GigaJoule.

    The domestic gas is metered at the consumers' site by the measurement of the volume of gas consumed. This reading is multiplied by the energy density (GJ/m^3) of the gas and printed on the customers' bill for payment.

    Since the electrical industry did not replace their kWh meters at the customers' premises, then as with the gas bill the reading is multiplied by 0.0036 to indicate the number of GJ used.

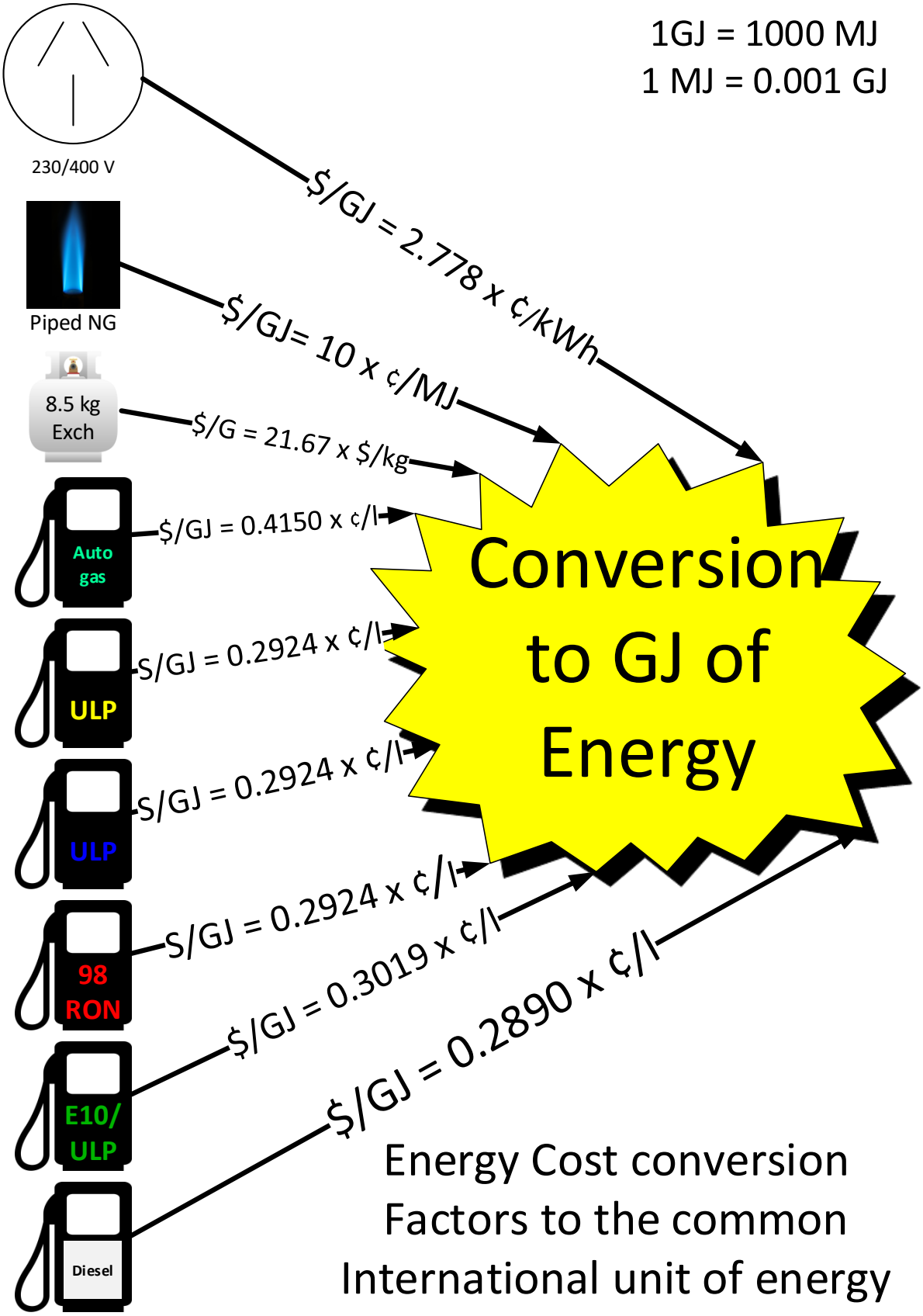
Recommendation: All energy consumption be billed in GJ and the price always referred to in $/GJ.

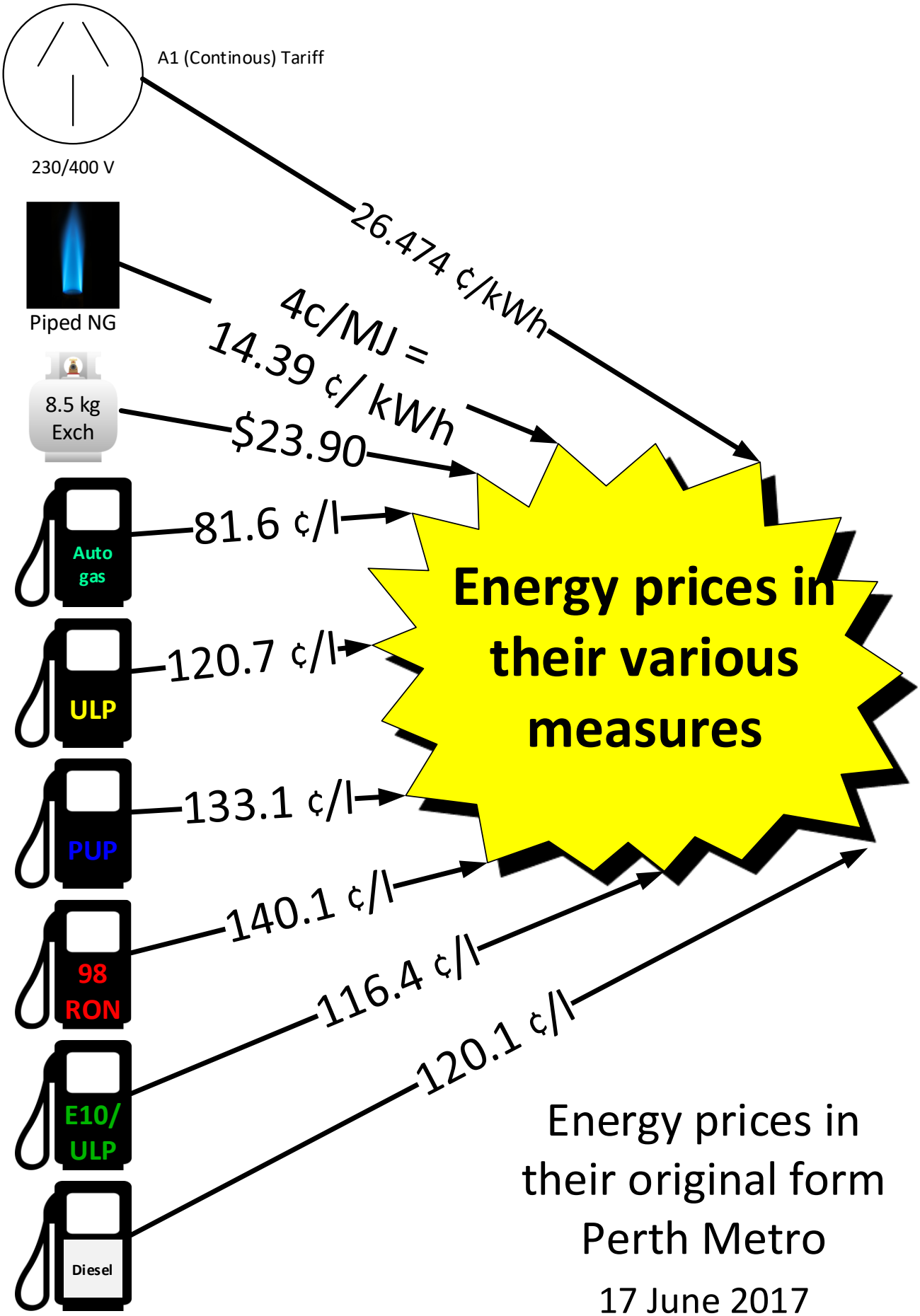
Recommendation: All energy storage devices will be described in either MegaJoule (MJ) or GigaJoule (GJ) depending on its size. The speed of charging and discharging will be in kilowatt (kW).

Attached is the required conversion factors and an example of typical prices using Perth Metro prices which really shows how expensive electricity is compared to other energy sources.

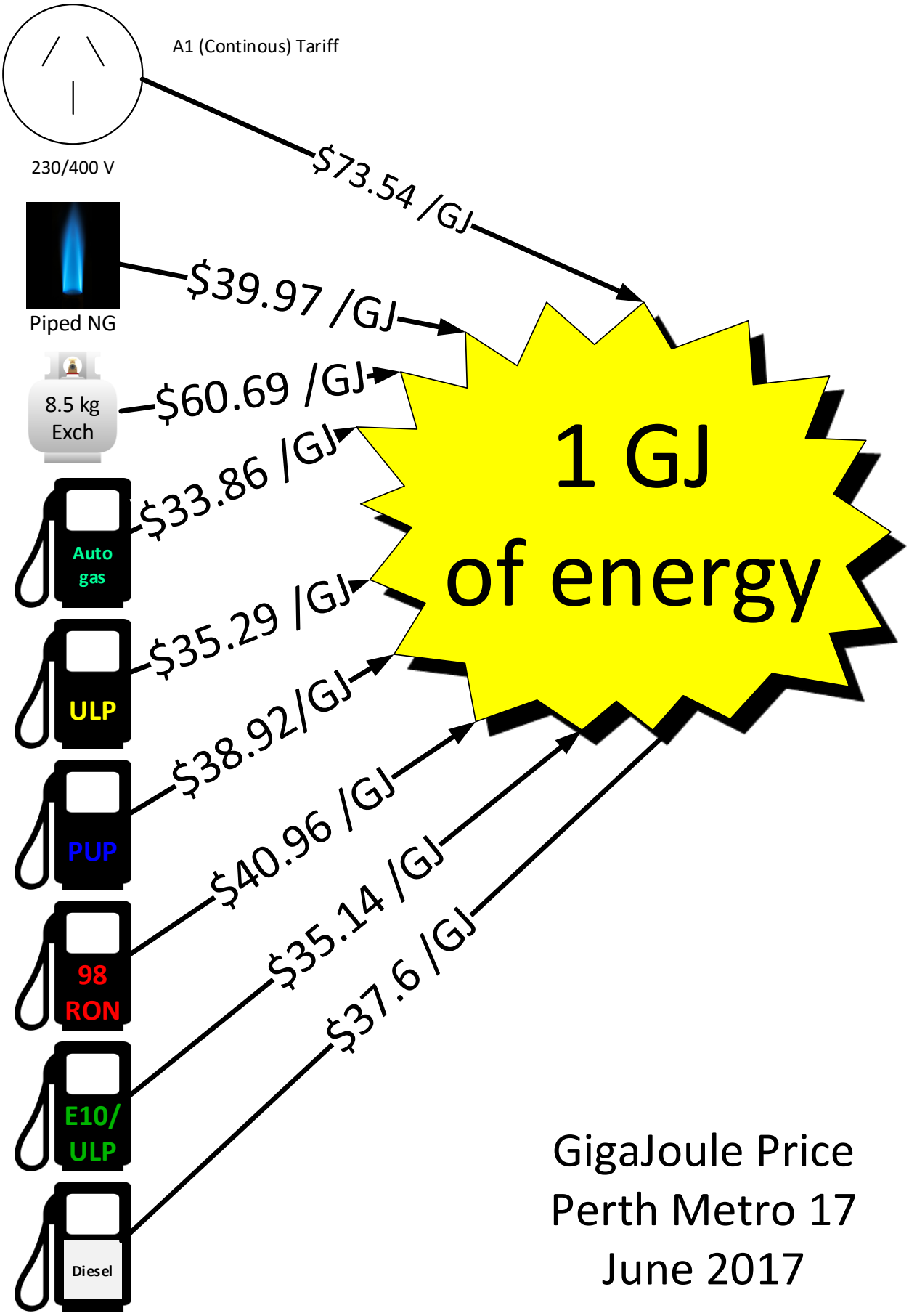
Alan Hughes

2017/06/29


1GJ = 1000 MJ
1 MJ = 0.001 GJ
230/400 V
$/GJ = 2.778 x ¢/kWh
Piped NG
$/GJ= 10 x ¢/MJ
8.5 kg Exch
$/G = 21.67 x $/kg
Auto gas
$/GJ = 0.4150 x ¢/l
ULP
$/GJ = 0.2924 x ¢/l
ULP
$/GJ = 0.2924 x ¢/l
98 RON
$/GJ = 0.2924 x ¢/l
E10/ ULP
$/GJ = 0.3019 x ¢/l
Diesel
$/GJ = 0.2890 x ¢/l
Conversion to GJ of Energy
Energy Cost conversion
Factors to the common
International unit of energy



Energy prices in their original form
Perth Metro
17 June 2017


A1 (Continous) Tariff
230/400 V
$73.54 /GJ
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$39.97 /GJ
8.5 kg Exch
$60.69 /GJ
Auto gas
$33.86 /GJ
ULP
$35.29 /GJ
PUP
$38.92/GJ
98 RON
$40.96 /GJ
E10/ ULP
$35.14 /GJ
Diesel
$37.6 /GJ
1 GJ of energy
GigaJoule Price
Perth Metro 17
June 2017

Similarly electric cars should be able to be compared with those using other fuels.