Submission by

Alternative Technology Association

on

AER's National Energy Price Comparator Website

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By Email to: AERinquiry@aer.gov.au

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1. Introduction

The Alternative Technology Association (ATA) welcomes the opportunity to respond to the *AER price comparator website – Issues paper* (the Issues Paper).

ATA is a national community-based, not-for-profit organisation representing consumers in the renewable energy and energy efficiency marketplace. The organisation was established in 1980 to empower our community to develop and share sustainable solutions and to promote the uptake of sustainable technologies.

The organisation currently provides service to approximately 6,000 members nationally who are actively engaged with small, medium and large scale renewable energy projects, energy efficiency and the national electricity market.

The ATA engages closely with its members on a diverse number of issues including feed-in and consumption tariffs, smart meters, retailer and distributor concerns, and renewable energy policy. The organisation has developed a refined understanding of consumers' attitudes towards energy through dialogue with its members and, using this information, has been significant contributor to the energy policy debate at both the Federal and State level.

This submission has been directly informed by feedback from ATA's Energy Policy Reference Group, a group of ATA members interested in energy-related policy processes and submissions.

2. Feed-in Tariff Products

2.1 Issues

The Issues Paper indicates that the website would note that the usage and estimated costs for customers with solar panels installed would be different, but not provide and assessment that allows customers with embedded generation to compare Feed-in Tariff products (or other import/export products, where they are available).

ATA believe this approach to be unsatisfactory as it does not support households with solar micro-generation to understand their opportunities at the retail level, and note that there are relatively simple methods that a price comparator tool could incorporate to address this issue.

Customers with embedded generation are undoubtedly a significant and growing proportion of customers within the NEM:

- In 2010, the total number of households with PV systems in Australia exceeded 300,000;
- Since mid 2010, new PV installations across Australia have exceeded 10,000 per month, on average;
- All new PV customers are required to enter into a new retail contract, and therefore need accurate, up to date information regarding retail offers available;
- By 2013, it is predicted that one in every six owner-occupied houses in Australia will have installed solar PV[1].

This growth in PV installations highlights the increasing importance of renewable energy to customers, and makes apparent the need to cater for these customers when comparing energy offers.

One of the major concerns of micro-generation customers is adequate information on the feed-in tariff (FiT) offers available, and the consumption tariffs (for regular grid provided electricity) available to customers who choose to take up that FiT. The common approach in numerous jurisdictions has been that once a customer signs up to a FiT contract, they are automatically reassigned to a certain tariff for consumption and do not have a choice in regards to the latter.

The experience of ATA members is that it is difficult to correctly compare FiT products and their resulting benefit, as:

- retailers offer different FiT rates (for example in Victoria, retailers offer anywhere between 60c to 68c/kWh, and in many states retailers offer different rates, that may or may not be supported by a feed in tariff);
- many retailers do not allow choice over consumption tariff offers with specific FiT offers;
- fixed charges and other aspects of the FiT product may not correspond with equivalent non-FiT products.

In light of these issues, ATA believes that it is necessary that the website also allow for a basic estimation of the energy exported to the grid from micro-generation customers, and achievable to do so.

[1] (ACIL Tasman (2010), *Small-scale technology certificates data modelling: projected take up of small-scale renewable technologies over calendar years 2011 to 2013)*

2.2 Recommendations

Drawing on ATA's considerable experience in developing tools to allow consumers to calculate the economics of their energy choices, including comprehensive payback calculators for domestic solar PV, we feel that there is an acceptable option for the price website that would allow consumers to compare FiT products.

While this feature of the comparator tool would be necessary to cater to consumers with solar panels, it would not add significant complexity or expense to the website development if designed using a model similar to the one described below. (A worked example of this calculation method is attached to this submission as a Microsoft Excel spreadsheet.)

2.2.1 User Input Required

Using the postcode previously entered by the user and an additional input – the size of the solar panel system in kilowatts – it is possible to estimate the annual exported energy from the solar panel system with sufficient accuracy for the purposes of comparing products.

The user input method to obtain the solar panel system information would contain a check-box which a consumer ticks if they own a PV systems and an input field to enter the size of the system (in kilowatts) as shown below:

Figure 1: Simple user input for solar power installation information

These relatively basic features are the minimum required to allow consumers with solar panels to compare FiTs.

2.2.2 Estimation of Exported Energy

Using the size of the solar panel system in kilowatts it is possible to estimate the annual energy exported from the solar panel system. The average annual energy exported by a solar panel system is approximately linearly correlated with the size of the solar panel system in kilowatts. The linear relationship depends on two parameters: A and B.

Annual Energy Exported in MWh = A x *(System size in kW) + B*

Based upon a recent study from PV systems in NSW[2], ATA suggests indicative values of A and B as:

$A = 1.4$
$B = -1.75$

2.2.3 Total Estimated Cost with Feed-in Tariffs

The total estimated cost is then calculated based on the annual energy consumption, as entered by the user or estimated by the website, and the exported energy to the electricity grid.

The cost due to energy consumed would be calculated in the same way as for all other retail market offers, using the consumption tariff associated with the FiT offer search result.

The income due to the exported energy would be calculated using the *Annual Energy Exported in MWh* multiplied by the FiT rate associated with the FiT offer search result.

The total final estimated cost would be the difference of these two values:

Total Estimated Cost = (Estimated Cost due to Energy Consumed) – (Estimated Income from Energy Exported to Grid)

Note that this method of estimation operates under the assumption that the data entered by the website user represents consumption data during a time when solar panels have been already installed.

For the situation where this is not the case, or when the website has calculated the consumption of the user using supplementary questions, refer to **Appendix A** for a simple method of calculating the total generation of a solar panel system based on the user's postcode and the size of the solar panel system in kilowatts.

2.2.4 Presentation of Feed-in Tariff Offers

It is recommended that the website presents a slightly updated results table for searches on FiT offers. To provide a benefit to the website users comparing FiT offers, the results table for FiT offer searches should include the following:

- FiT rate;
- Associated consumption tariff;
- Total estimated cost taking into account income from the FiT; and
- Total estimated income from the FiT.

[2] AECOM Australia Pty Ltd, "Solar Bonus Scheme, Forecast NSW PV Capacity and Tariff Payments", October 2010. http://www.dtiris.nsw.gov.au/__data/assets/pdf_file/0016/360142/AECOM-REPORT-for-Solar-Bonus-Scheme-Review.pdf

An example of the results displayed from a FiT search is displayed below.

Figure 2: Suggested FiT Search Results for the Price Comparator

Retailer	Plan (offer)	FiT offer	Estimated annual cost (includes GST)	Tariff rates (inc. and exc. GST)	Incentives and special features (financial and non-financial)	Contract terms and conditions (fees include GST)
Retailer A	Energy Saver with FiT Price Fact Sheet link	24.3 c/kWh	$1135 per annum $307 income from FiT per annum	First 1750 kWh per quarter: · 17.35c per kWh (exc. GST) · 19.08c per kWh (inc. GST) Balance: · 25.5c per kWh (exc GST) · 28.05c per kWh (inc. GST) Daily supply charge: · $0.430 per day (exc GST) · $0.473 per day (inc GST).	· 12 month magazine subscription · Green power options available: 10%, 20%, 50%, 100%	· 2 year fixed term contract · Early contract termination rates: · Year 1: $100 · Year 2: $70
Retailer C	Flexi Saver with FiT Price Fact Sheet link	22.9 c/kWh	$1155 per annum $289 income from FiT per annum	First 1750 kWh per quarter: · 17.35c per kWh (exc. GST) · 19.08c per kWh (inc. GST) Balance: · 25.5c per kWh (exc GST) · 28.05c per kWh (inc. GST) Daily supply charge: · $0.430 per day (exc GST) · $0.473 per day (inc GST).	· 5% discount for bill paid on time	· No early contract termination fee · No moving home disconnection fee

3. GreenPower Filtering and Presentation

As at the end of 2010, there were approximately 800,000 residential and commercial customers of GreenPower in Australia[3]. GreenPower represents an important consideration for consumers when choosing or comparing electricity retail offers.

The Issues Paper suggests that GreenPower options might be presented in a similar way to IPART's website My Energy Offers. The presentation of GreenPower options on IPART's website is somewhat difficult with a filtering system that removes any previously chosen GreenPower selections and that presents only exact GreenPower percentage values. ATA members that recently used IPART's website have described the interaction with GreenPower options as a clumsy and confusing experience.

3.1 Recommendations

ATA recommends two improvements that will allow consumers to interact with and understand GreenPower more effectively:

1. Create a search result filtering option that includes ranges of GreenPower percentages so users can compare similar offers.
2. Show both the base tariff cost and the cost due to GreenPower separately in the "Total estimated cost" column.

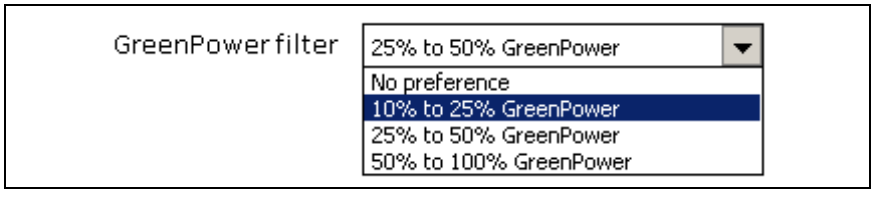
3.1.1 GreenPower Filtering

When using IPART's My Energy Offers website, it is difficult to compare two GreenPower market offers where the two offers involve different GreenPower percentages.

For example, it is not easy for the website user to compare one offer that includes 15% GreenPower with another that includes 20% GreenPower. This is a valid scenario for a consumer comparing retail offers since the percentages of GreenPower offered often differ across retailers.

ATA recommends an approach that will allow website users to compare retail offers with similar amounts of GreenPower through a filtering method, as indicated below:

Figure 3: Example filtering method for GreenPower offers



[3] http://www.greenpower.gov.au/About-Us/Audits-And-Reports/~/media/Business%20Centre/Quarterly%20Reports/quarterReview_2010_Quarter_4_2010.pdf

By presenting the website user with ranges of GreenPower percentages the user can compare similar products across retailers more easily. The ranges should be inclusive, meaning a "10% to 25% GreenPower" range would include offers that contain exactly 10% and exactly 25% GreenPower.

Although other GreenPower percentage ranges may be considered, the ATA suggests the following:

- 10% to 25% GreenPower;
- 25% to 50% GreenPower; and
- 50% to 100% GreenPower.

3.1.2 Total Estimated Cost with GreenPower

When electricity consumers on GreenPower retail offers receive their electricity accounts, the cost per kilowatt-hour of GreenPower is displayed as a separate line-item. For this reason, it is important to show both the base tariff and the cost due to GreenPower separately in the "Total Estimated Cost" column of the results table.

This allows consumers to understand more precisely how different retailers are pricing their GreenPower offers, and allows them to make more informed decisions on retail offers that include GreenPower.

The display of a search on market offers could be displayed as shown here.

Figure 4: Display of Total Estimated Cost with GreenPower options

GreenPower filter: 50% to 100% GreenPower

Retailer	Plan (offer)	Estimated annual cost (includes GST)	Tariff rates (inc. and exc. GST)	Incentives and special features (financial and non-financial)	Contract terms and conditions (fees include GST)
Retailer A	Green Energy Saver with FiT Price Fact Sheet link	$1442 per annum + $280 per annum for 75% GreenPower	First 1750 kWh per quarter: · 17.35c per kWh (exc. GST) · 19.08c per kWh (inc. GST) Balance: · 25.5c per kWh (exc GST) · 28.05c per kWh (inc. GST) Daily supply charge: · $0.430 per day (exc GST) · $0.473 per day (inc GST).	· 12 month magazine subscription · Green power options available: 15%, 20%, 75%, 100%	· 2 year fixed term contract · Early contract termination rates: · Year 1: $100 · Year 2: $70
Retailer B	Green Flexi Saver with FiT Price Fact Sheet link	$1425 per annum + $290 per annum for 100% GreenPower	First 1750 kWh per quarter: · 17.35c per kWh (exc. GST) · 19.08c per kWh (inc. GST) Balance: · 25.5c per kWh (exc GST) · 28.05c per kWh (inc. GST) Daily supply charge: · $0.430 per day (exc GST) · $0.473 per day (inc GST).	· 5% discount for bill paid on time · Green power options available: 10%, 25%, 80%, 100%	· No early contract termination fee · No moving home disconnection fee

4.0 Further Contact

Thank you for the opportunity to submit to this inquiry and please do not hesitate to contact us at Dominic@ata.org.au or on (03) 9631 5406 should you have any questions regarding the content of this submission.

Yours sincerely

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Appendix A

Simple method for estimating the energy generated by a solar system

Using the postcode entered by the user, it is possible to look-up the corresponding zone for renewable energy generation as specified by the Office of Renewable Energy Regulator (ORER)[4].

With the ORER zone rating, associated with each ORER zone, and the size of the system in kilowatts, it is possible to estimate the amount of energy generated by a solar panel system during one year:

Postcode → *ORER zone* (by look-up)

ORER zone → *ORER zone rating* (by look-up)

Annual Generation in MWh = (ORER zone rating) x *(System size in kW)*

This is the same method used by ORER when finding the number of Small-scale Technology Certificates (STCs) to apply to a solar panel system under the Federal *Renewable Energy Target* scheme.

[4] ORER zones and zone ratings: http://www.orer.gov.au/publications/pubs/sgu-stc-calculations-0311.pdf