

17/12/2012

Dear Sir/Madam,

I am concerned about some of the statements, data and opinions published in the Draft Report into the review of Solar Feed-In Tariffs.

Despite the terms of reference for the review specifically excluding the current 44c/kWh feed-in tariff, there is repeated reference to the 44c/kWh scheme. Some of the statements made in the report are inflammatory, unsupported by data and promote a negative opinion of Solar Feed-In Tariffs in general. There is also no counterbalanced evidence, discussion or opinion presented in the Draft Report that explains the benefits of Small Scale PV installations both to the environment, consumers and future electricity generation for QLD.

The reference that the Initial Scheme was 'exceptionally generous' is subjective, inflammatory, and is used more than once through the draft report. When the Initial Feed-In Tariff was introduced, it was in fact on par with the average Feed-In Tariff provided by other Australian States and Territories. The fact that there has been a significant increase in Small Scale PV Installations demonstrates that the Feed-In Tariff was particularly effective (and consequently appropriate) in promoting Small Scale PV Installations, which was the original premise for the Feed-In Tariff. The main problem with the 44c/kWh scheme is that it was made available for far too long (considering it met the Target Generating Capacity in mid 2010/2011 period), and was not then reduced to a lower level that reflected the then reduced cost for PV Installations.

Whilst the Statement 'The Growth in PV Installations is increasing electricity costs for all Queensland Consumers' is a strictly correct, it implies that the Solar Feed-In Tariff is responsible for the massive increases in Electricity Prices, and does not quantify the extent that the growth in PV installations have affected Notified Tariffs. This statement is not supported by any data which has the Solar Feed-In Tariff (FIT) separated from other issues that affect Notified Tariffs increases. In reviewing the increases in Solar Feed-In Payments and Notified Electricity Tariffs between 2008 and 2012, there is no correlation between them. Between 2008/2009 to 2011/2012, the increase in revenue from Residential and Small Business Tariffs/connections has been \$658m (i.e. 50.99% increase from \$1290m in 2008/2009 to \$1949m in 2011/2012), resulting in an increase in revenue over the same period of \$1518m. Over the same period, Solar Feed-In Tariff Payments have cost distributors \$122m, only 8% of the increase in revenue, and only 1.8% of the total revenue received. The remaining 92% of the increase in revenue is by other issues, which is clearly the driving reason for Notified Tariff increases. [Comparison of Tariffs and FIT Payments are based upon Final Tariff Determinations by QCA for each respective year and are indicated on the attached document 'Electricity

Charges’]. Energex and Ergon report they expect the accumulated Feed-In Tariff Cost (of the 44c/kWh FIT) will be \$2200m by 2028, but considering the revenue from Tariff Increases from 2008/2009 to 2011/2012 will also increase the revenue obtained by at least \$12046m (compared to 2008/2009 Tariffs and excluding further increases to current 2012/2013 Tariffs), it is apparent that current Notified Tariffs are more than sufficient to fund the current 44c/kWh scheme, and most likely any reasonable future FIT schemes, without further increases.

There is no reference in the Draft Report to the investment by Residence and Small Business in Small Scale PV Installations. Between 2008/2009 and 2011/2012, it is noted there has been 193837 PV installations, which represents an installation by approximately 13.9% of all connections (not a small percentage by any means). Benefits of this investment have been a significant reduction in PV Installation costs, making installations possible for lower income consumers, and significant industry stimulation and broader follow through benefits to the QLD economy. Despite the reduction in PV Installation costs, there has still been an approximate \$1193m of out-of-pocket investment made by Small Business and Residential Customers to achieve the current level of PV Installation [Estimation of Out-Of-Pocket investment are based upon linear reduction of electricity installation costs and are indicated on the attached document ‘Small Scale PV Investment’]. Currently only \$122m of this investment has been recovered by FIT payments. The remaining investment, and future investment by Residence and Small Business should be able to be recovered through an appropriate Feed-In Tariff scheme. Recovery by investors on the 44c/kWh scheme will not necessarily be possible to the end of 2028 due to loss of eligibility, and this is acknowledged (and expected) in the Draft Report. For Residential and Small Business on the 44c/kWh scheme, eligibility is only retained if they maintain the electricity account at the original installed PV Meter Point. When current participants move to another residence/lease and open a new account at a different Meter Point, they lose all eligibility for the current scheme, even if there is a PV system installed at the new Meter Point. Providing the proposed 6.81c/kWh FIT would not allow the original Residence and Small Business investors to recover their out-of-pocket investment, and new PV Installations would not be able to recover their investments in a reasonable time frame.

In addition to reducing PV Installation costs, Small Scale PV Installations now contribute up to 505MW generation capacity (during daylight hours) of renewable energy. In comparison, the total generating capacity of Renewable Energy sources by QLD’s 2 largest Electricity Providers (Stanwell and CS Energy) is only 664MW (out of their 8848MW total generating capacity), all of which are based on Hydroelectric generators which were constructed prior to 2008. Without Small Scale PV Installations, QLD investment in Renewable Energy production would not have increased at all since 2008. Admittedly PV Installations are only generating during daylight hours, but that was always going to be the case.

There is a commonly repeated argument that PV Generation (which occurs through the daylight hours) does not provide any benefit to reduce peak demand periods. This statement is not supported by the load data used by the QCA to determine Notified Electricity Prices. In the Period between 1/1/09 and 31/12/09, Peak electricity generation occurred on 11/12/09 between 2:00 & 2:30pm @ 8804MW. In the Period between 1/1/10 and 31/12/10, Peak electricity generation occurred on 18/1/10 between 3:00 & 3:30pm @ 8891MW. In the Period between 1/7/10 and 30/6/11, Peak electricity generation occurred on 21/2/11 between 7:00 & 7:30am @ 8836MW. In contrast, in the Period between 1/7/10 and 30/6/11, maximum load draw from the network for Residences and Small Business occurred on 20/2/11 between 6:30 & 7:00pm @ 2528MW. The Peak draw for Residences and Small Business did not even occur on the same day as Peak Generation, and in any case only accounts for 28.6% of the Peak electricity generated. Each of the Peak electricity generation periods occurred outside of the usually claimed peak period of 5:00pm and 10:00pm, and also occurred during daylight hours when PV Installations would be effective. It is clear from the data used between 1/1/09

and 30/6/11 that PV Installations are effective during Peak Generation periods, and that Residence and Small Business do not create the Peak Generating requirements claimed by numerous submissions in the Draft Report.

There was a submission by Mr Atherton that Residence and Small Business with Small Scale PV Installations avoid making contributions to capital costs of the Electricity Network, but this is a misunderstanding of the Feed-In Tariff scheme. It appears that this is a misunderstanding that is repeated throughout most of the non-PV Installed community. All connections to Energex and Ergon distribution networks are required to pay connection fees, irrespective of their usage. FIT Payments only occurs when electricity produced by the PV Installation exceeds the current demand at the installation, then the excess electricity generated is exported to the distribution network for use by the remaining network consumers. The main reason the current Tariff appears inequitable is that the current Tariff Connection Charges do not reflect the actual costs for providing and maintaining the network connections. However this is currently under review by the QCA and it is expected that network connection charges and usage charges will be more cost-reflective.

The Authority holds the position that the only cost benefit of Solar PV Installations is to the Retailers and the the proposed FIT should only reflect the cost savings recovered by the Retailer, however this ignores the fact that Electricity generated by PV Installations allow a reduction of Electricity Production by Electricity Providers, Reduces Network costs due to reduced network losses and infrastructure investment between distant providers, in addition to reduced retailing costs. It implies that electricity purchased by retailers (and in particular purchased from the PV Installations) are somehow separate from the remaining energy on the network, which is a fundamental misrepresentation of how electricity works. It contradicts Item 1 of the National Principles For Feed-in Tariff Schemes agreed in COAG meeting November 2008. Item 1 identified that 'Micro renewable generation to receive fair and reasonable value for exported electricity' and also 'require market participants to provide payment for that export which is at least equal to the value of that energy in the relevant electricity market and the relevant electricity network it feeds in to, taking into account the time of day during which electricity is exported'. The value of that energy is clearly more than the potential savings recovered by retailers, and affects all participants in electricity supply. It is clear from Item 1 that there should be a value paid to the Micro renewable generator which should reflect the value 'to the market and network'. With the intended review of electricity tariffs to reflect true costs (and values) of electricity supplied on the networks, it would be logical to assume that the proposed FIT rates should reflect the new proposed 'usage' rates, less headrooms & profits associated with running a profitable business. This would allow the investors in Small Scale PV Installations to be treated equitably with all electricity generators, and allow them to recover their investment costs, which is a right attributed to all other participants in the Electricity Market. The costs of the FIT Payments should be distributed between each participant of electricity supply (supplier, distributor and retailer) in proportion to the relevant components which contribute to the determined 'usage' rates.

It is clear from the statements and submissions in the Draft Report, and the Data used by the QCA for the determination of Notified Tariffs between 2008 and 2012, that there is insufficient information and a misunderstanding in the community regarding the Value of PV Installations and the degree of Investment made by Residence and Small Business to install Small Scale PV. To provide informed advice to the Minister for Water and Electricity Supply regarding future FIT schemes and funding, further data is required to separate the true value of Exported PV energy from the remaining costs that determine Notified Tariffs. With the intended restructuring of Domestic Electricity Tariffs to reflect the true costs (value) of electricity supply, it would be inappropriate to determine 'appropriate' FIT based upon old Tariffs without also comparing it the the restructured Notified Tariffs, which won't be determined until March 2013. With the abundant Solar Energy potential in QLD, any future FIT schemes should encourage further investment by Residence and Small

Business investment in Small Scale PV Installations, increasing the number of customers that can access the benefits of PV installations. Similarly, given the significantly reduced cost of PV Installations, further investment should be made by the Low Cost Housing developers to provide access of PV installations to the low income customers. These measures would reduce the perceived imbalance of benefit from PV Installations.

Whichever FIT scheme and price is adopted, the FIT scheme costs need to be more transparent to allow consumers and participants to accurately report and understand the costs involved, and need to allow cost recovery by the investors in Small Scale PV Installations. A system similar to that implemented by ActewAGL would be sufficiently transparent, where the costs of the FIT Payments are estimated each year as part of the determination of Notified Electricity Tariffs. This will demonstrate to all how FIT will affect the Notified Tariffs. In the following year, the actual costs of FIT Payments for the year are collected and compared to the original estimate. FIT payments in excess of the estimate is recovered by increasing the following year's Notified Tariffs, but if FIT Payments are overestimated, the excess is reimbursed to all Residential and Small Business customers through reduced Tariffs. In this way, the true cost of FIT Payments can be monitored and understood by all customers and participants.

Regards,  
G [REDACTED] Bell

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Tariff	Connections      Average Usage		2008-2009			Tariff Rates 2009-2010			2010-2011			2011-2012			Accumulated	2012-2013 ##			Accumulated
			Fixed	Usage	Total (\$mil)	Fixed	Usage	Total (\$mil)	Fixed	Usage	Total (\$mil)	Fixed	Usage	Total (\$mil)		Fixed	Usage	Total (\$mil)	
T11	1277588	5110	68.28	0.1481	1054.10	79.08	0.1713	1219.36	89.64	0.1941	1381.70	95.52	0.2069	1472.78		95.52	0.23071	1628.22	
T20	93354	7480	123.96	0.01659	23.16	143.4	0.192	147.46	162.48	0.2175	167.05	173.16	0.2319	178.10		392.13	0.201	176.96	
T22	15543		272.88		80.33	315.84		92.97	357.84		105.32	381.48		112.24		392.13		113.83	
	peak	17796		0.2016			0.2333			0.2643			0.2817				0.202		
	offpeak	18415		0.071			0.0822			0.0931			0.0992				0.18118		
T31	216000	2064		0.0604	26.93		0.0699	31.16		0.0792	35.31		0.0844	37.63			0.11009	49.08	
T33	511000	1985		0.0889	90.17		0.1029	104.38		0.1166	118.27		0.1243	126.08			0.15595	158.19	
T41	4795		461.04		16.21	483.48		18.52	547.68		20.98	583.8		22.35		617.28		28.18	
	demand	14	24.44			28.28			32.04			34.15				19.622			
	usage	50133		0.0514			0.0595			0.0674			0.0718				0.09944		
	Total Charges				1290.89			1613.84			1828.62			1949.18	6682.54			2154.46	8836.99
	FIT Payments				0.60			4.70			22.90			94.30	122.50			184.20	306.70
	FIT % of Charges				0.05			0.29			1.25			4.84	1.83			8.55	3.47
	Charges Increase							322.95			214.78			120.56	658.28			205.28	984.12
	Charges Increase %							25.0			13.3			6.6	50.99			10.5	76.24
	FIT % Increase in Charges							1.46			10.66			78.22				89.73	

## - Projected Charges & FIT

	2008-2009	2009-2010	2010-2011	2011-2012	Accumulated
Total Installations	5926	24514	66355	97042	193837
% Residential & Small Business Connections	0.43	1.76	4.77	6.98	13.93
MW Installed	9.5	42.9	159.5	293.4	505.3
Installed Cost \$/kW	4000	3333	2667	2000	
Investment in Small Scale PV (\$mil)	38.00	142.99	425.39	586.80	1193.17
FIT Payments (\$mil)	0.60	4.70	22.90	94.30	122.50