



**12 September 2011**

Independent Pricing and Regulatory Tribunal  
PO Box Q290  
QVB Post Office NSW 1230

By email to [ipart@ipart.nsw.gov.au](mailto:ipart@ipart.nsw.gov.au)

Dear Chairman,

### **Solar Feed-in Tariffs (FiT) Issues Paper**

AGL Energy welcomes the opportunity to comment on the Independent Pricing and Regulatory Tribunal Issues Paper *Solar Feed-in Tariffs - Setting a fair and reasonable value for electricity generated by small-scale solar PV units in NSW*.

As the leading investor in renewable energy and one of the largest energy retailers in Australia, AGL Energy (AGL) is well placed to comment on the *Issues Paper*. AGL operates across the supply chain and has investments in coal-fired, gas-fired, renewable and embedded electricity generation. AGL is Australia's largest private owner, operator and developer of renewable generation in Australia with 1,073 MW of renewable capacity (at 30 June 2010). AGL is also a significant retailer of energy with over 3 million electricity and gas customers. AGL is able to provide perspectives in relation to solar feed-in tariffs as both: an entity that sells and installs solar PV units; and a large retailer of electricity and gas.

#### **Overarching Comments on IPART Review**

AGL is concerned about the lack of overarching public policy objectives underpinning the development of feed-in tariff policies throughout Australia. AGL believes that the lack of underlying public policy objectives being determined before the implementation of FiT policy is the main driver of the poor outcomes experienced post the introduction of the Solar Bonus Scheme. With specific regard to the review requested of IPART, we strongly support the following constraints outlined in the Terms of Reference (ToR) for the review:

- The policy should not result in increases in electricity prices or require funding from the government budget (i.e. there should be no cross subsidies);
- Any recommendations should be administratively simple and take into account the impact on business operations; and
- The policy should operate in such a way as to support a competitive electricity market in NSW.

In this context, AGL's submission focuses on two key issues: should IPART introduce a tariff of some form for solar PV customers not eligible for the Solar Bonus Scheme; and should retailers contribute to the existing costs of the Solar Bonus Scheme.

In relation to the first issue, AGL is not opposed to IPART publishing a benchmark rate annually for solar PV generation which customers can use to assess offers from retailers in relation to the installation of solar PV. AGL notes the vast majority of retail customers

currently purchase energy from a retailer that voluntarily offers a 'solar tariff premium' for the energy exported, which reflects the retailer's assessment of the value of that energy. Retailers use this solar tariff premium as a marketing tool in order to increase the competitiveness of market contract offers for customers. As such, there is no public policy justification for establishing a regulated solar PV tariff. In other words, the market is currently working as intended: retailers are already offering fair tariffs reflecting the market's assessment of the value of solar PV generation.

If a solar tariff premium amount was mandated by IPART AGL consider it likely that such a tariff would be too rigid and inflexible and not reflect localised conditions that vary significantly within the state of NSW. This would have the effect of potentially undermining competition within the NSW retail electricity market and would be inconsistent with a key constraint placed upon IPART through the ToR (the policy should operate in a way to support a competitive electricity market in NSW). In particular, if a mandated solar tariff premium was set too high this could reduce the ability of retailers to provide these customers with competitive electricity supply offers. Accordingly, AGL believes that a benchmark rate is an appropriate regulatory response which would overcome any information gaps that may or may not exist within the market.

It is critical that the solar tariff premium paid by retailers to embedded solar PV generators be determined by the market. Regulating such a tariff would be a significant retrograde step in relation to microeconomic reform of Australia's energy markets. The Australian Energy Market Agreement clearly articulates the agreement among all jurisdictions to remove existing price regulation where competition is demonstrated to be effective. Accordingly, adding a further regulatory pricing structure to existing markets would be in contrast to the intent of the Australian Energy Market Agreement.

In relation to the second issue of focus for AGL, retailers currently pay up to \$0.08 per kWh voluntarily for energy produced by solar PV systems from customers participating in the Solar Bonus Scheme. As noted by IPART in Section 5.3, requiring retailers to subsidise the costs of the Solar Bonus Scheme, in addition to current voluntary payments, could affect the amount of payments those customers currently receive from retailers. If this was the case, it would have the effect of transferring benefits currently received by those customers to the NSW taxpayer. Whilst this may go some way to addressing the regressive nature of the current Solar Bonus Scheme AGL are of the view that this would increase regulatory complexity and ultimately retailers cost structures. The effect of this would add further cost pressures to current electricity prices which would be inconsistent with the ToR. ,

If existing contracts are retrospectively altered, significant regulatory risk will be introduced into the NSW retail energy market. This will have a marked impact on competition in NSW energy markets as all participants assess whether government legislation will be used to override private sector contracts. Customers that have entered into economic decisions in good faith based upon their particular economic circumstances may find themselves adversely affected. Such an outcome would clearly breach the constraint related to supporting a competitive market in NSW.

### **Regressive Nature of Solar PV FiT Policies**

In a paper published in *Economic Analysis and Policy*<sup>1</sup>, economists from AGL outline the highly regressive nature of solar PV FiT policies. The paper concludes that the implied rate of taxation associated with FiT policies is *inversely* correlated with income. Alternatively put, FiT policies are highly regressive in nature. In fact, the implied rate of taxation is 2.6 times higher for households in the lowest income bracket (0.089%) than the higher income bracket (0.034%). The paper outlines three reasons why such an outcome is unacceptable for social policy reasons:

- The households least able to afford the upfront capital costs associated with installing solar PV are those that pay the highest effective rate of taxation. As such, in addition to being a regressive form of taxation, FiT are a cross subsidy of wealth from lower income households to higher income households.

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<sup>1</sup> Nelson, T. Simshauser, P. & Kelley, S, (2011), "Australian Residential Solar Feed-in Tariffs: Industry Stimulus or Regressive form of Taxation?", *Economic Analysis & Policy*, Vol. 41 No. 2

- Alternative policies exist which provide similar outcomes in relation to the production of new renewable energy which do not result in the same perverse outcomes from a social equity perspective. Other mechanisms for supporting renewable energy, such as LRET, are not regressive in nature. These mechanisms ensure that all consumers benefit through the provision of renewable energy. Each consumer effectively captures the costs and benefits of renewable energy in proportion to their energy spend. In contrast, the renewable energy produced and consumed as a result of FiT solely benefits the individual household where the solar PV unit is installed.
- The “absolute” nature of having the title deed to property as the single biggest eligibility criteria. Only households that own their own home can install solar PV systems. As such, the proportion of the population that is incurring the highest incidence of taxation, those renting, are unlikely to be able to take advantage of the policy.

AGL believes that these social policy considerations must form part of IPART’s report to the NSW Government on any issues associated with “fairness” in relation to payments made to individuals with solar PV installed at their property.

### **Methodology for Calculating the Financial Gain to the Retailer**

AGL notes the broad methodology outlined in the Issues Paper relating to calculating the financial gain to the retailer. The methodology appears sound in relation to assessing any gain relating to: the difference between an outcome where a FiT is paid and an outcome where a FiT is not paid; and the value of the energy referenced to wholesale energy cost structures (i.e. direct costs). However, while the methodology is sound, AGL is disappointed that the Issues Paper only occasionally makes reference to the fact that almost all retailers (measured by market share) offer a voluntary payment to customers with solar PV in recognition of the value it provides. It should be made more explicit in any future discussion that a retailer would only make a financial gain where the value of the energy produced by the solar PV system exceeds the voluntary payment made by the retailer.

### **Estimating the financial gain to the retailer (Question 1 and 3)**

AGL agrees in general with the analysis that IPART has conducted in assessing the financial gains to retailers as a result of PV exports to the grid (Box 3.2). Customers are charged by retailers based on the energy imported from the grid without any offset of the energy exported. Distributor network charges are also levied on the same basis.

Under net metering arrangements and where no feed-in tariff is paid to PV customers, retailers that do not pay a tariff could make a saving as a result of the AEMO settlement process where imports from the grid are reduced by the energy exported by PV customers. If no feed-in tariff is paid, retailers save on the wholesale cost of the energy exported by PV customers. Similarly, AEMO market charges and RET costs are based on the same settlement data so there is a saving on these charges.

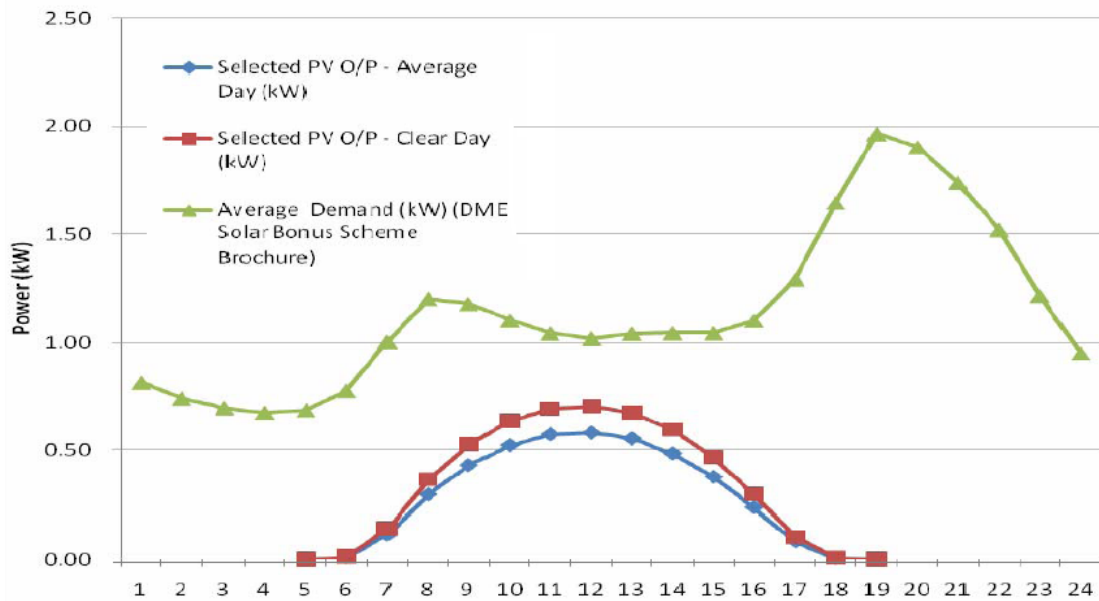
However, as articulated earlier in this submission, under current offers AGL does not retain these wholesale savings and passes them onto solar PV customers via a solar tariff premium of 8c/kWh (\$80/MWh) for PV exports. This premium was established several years ago and may be varied over time depending upon market conditions.

It is also relevant to recognise that with interval meters, the wholesale cost of energy imported is likely to differ from that of energy exported by PV customers as a result of the difference in timing of the imports and exports. Although the imports and exports can be netted off, the pool costs may not be treated in the same way.

AGL believes that the tariffs currently paid by retailers such as AGL take into account the benefits of solar PV in relation to its production at different times of the day. AGL notes that while there is some coincidence of solar PV output and higher than average residential demand (as outlined in the *Issues Paper* using Essential Energy data in Figure 3.2), the correlation is not absolute and varies significantly based upon location, season and other factors. Figure 1 below outlines data provided by Energex which summarises conditions likely to be experienced in south east QLD and northern NSW.

Figure 1

## PV Output VS Demand in SEQ Homes



Source: Energex presentation to QLD Power and Gas, October 2010

Overall, it is inconclusive whether a retailer's load profile is improved by energy exported by PV customers. It is possible that the load profile is worsened by PV exports if the reduction in a retailer's load is not matched by a proportionate reduction in peak demand. In this context, it is worth examining the long-run marginal cost of power generation reflecting a blend of generation sources most suited to meeting varying demand. In its report to IPART as part of the 2011 retail pricing determination process, Frontier Economics outlined stand-alone LRM estimates within NSW from \$62.60 to \$70.08 per MWh. AGL notes that the voluntary payments being made to solar PV generators vary from \$60 to \$80 per MWh depending upon the region and retailer.

### Retailer Compliance with Renewable Energy Target Legislation (Question 2)

AGL notes that compliance with RET is a Federal obligation. AGL cautions against state governments or regulators assessing whether the Commonwealth or ORER will or will not adjust obligations on the basis of AEMO settlements data now or in the future.

### Additional Costs for Retailers in relation to solar PV (Question 4)

There are significant implementation and incremental ongoing costs in serving PV customers. Implementation costs include: changes to IT systems to cater for new retail and network tariffs; and training and related costs associated with changes in federal and state policies affecting the PV market including communication with customers. The largest component of cost increases relates to customer service where dedicated teams have been created to manage enquiries, contracting, billing and processing of refunds relating to PV customers.

### Impact of Solar PV on Networks

Under net metering, as electricity is generated and utilised by PV customers, less energy is imported from the grid from existing infrastructure. Regardless of any change in capital expenditure, this results in deterioration in network utilisation and the revenue recovered by distribution networks is reduced. As network businesses operate under regulated rates of return, this will eventually result in higher network prices in the medium to long term (when the price path for network prices is re-set in subsequent determinations) for all customers, with and without PV installations.

## **Assessing retail market competition**

AGL note that IPART are seeking comments in relation to the impact of the current state of retail electricity market competition on the need for regulation of a solar tariff premium. AGL is of the view that voluntary payments being made by retailers is a strong signal that a competitive market for retail electricity customering exists. In addition, AGL would highlight that in a recent review of retail electricity competition in NSW by the Australian Competition & Consumer Commission (ACCC) (in relation to a potential change in market structure associated with the NSW Government privatisation of state-owned electricity retailers) that competition from existing players and the potential for new entry would maintain competition in the retail electricity market<sup>2</sup>.

## **Form of Regulation for non-Solar Bonus Customers (Question 17)**

As outlined earlier in this submission, AGL is not opposed to IPART publishing a benchmark rate annually for solar PV generation which customers can use to assess offers from retailers in relation to the installation of solar PV. AGL notes the vast majority of retail customers currently purchase energy from a retailer that voluntarily offers a solar tariff premium for the energy exported, which reflects the retailer's assessment of the wholesale value of that energy. As such, there is no public policy justification for establishing a regulated solar tariff premium.

## **Retailer Contributions for the Solar Bonus Scheme (Questions 24 and 25)**

As outlined earlier in this submission, AGL notes that the constraints within the ToR effectively prevent IPART from recommending retailer contributions to the Solar Bonus Scheme. AGL is concerned that the regulatory risk associated with retrospectively altering contracts has not been adequately considered in the Issues Paper. In particular, AGL is concerned with the following statement, "(voluntary) premiums are discretionary and can be changed in accordance with the retailer's obligations notifying the customer in accordance with the *Electricity Supply (General) Regulation 200147* and the terms of the contract." By definition, requiring retailers to retrospectively alter contract would introduce significant regulatory risk and reduce market participation and competition.

## **Conclusion**

In conclusion, AGL believes that the vast majority of retailers (measured by market share) already pay a 'fair' price for solar PV generated by embedded installations. Accordingly, a light handed benchmarking approach should be adopted to ensure compliance with the ToR. Furthermore, AGL believes there is no public policy justification for requiring retailers to make contributions to the Solar Bonus Scheme. Should you have any questions in relation to this submission, please contact me at [tanelson@agl.com.au](mailto:tanelson@agl.com.au) or on (02) 9921 2516.

Yours sincerely,



Tim Nelson  
Head of Economic Policy and Sustainability

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<sup>2</sup> Australian Competition and Consumer Commission (2011), "Public Competition Assessment - AGL Energy Limited and Origin Energy Limited - proposed acquisitions of assets being sold as part of the New South Wales Energy Privatisation", page 17.