
APVA Response to the Climate Change Authority Renewable Energy Target Review Discussion Paper

November 2012

Introduction

The Australian PV Association commends the CCA for:

- Recognising that policy stability is important for investment certainty
- Not changing either the size of the LRET target, nor converting it to a percentage value
- Taking into account the effect that renewable energy has in depressing wholesale electricity prices
- Reducing the frequency of scheme reviews from 2 years to 4 years, thereby lengthening the periods of policy certainty
- Retaining the current deeming arrangements (although see comment below regarding lack of clarity for larger PV systems)
- Foreshadowing an increase to the post-2020 target to be decided at the 2016 review, although given the lead time for development of large projects, and the current instability in the REC price, an earlier decision would be preferable.

The following focuses on two particular recommendations of the CCA regarding the SRES:

- i) Reducing the eligible size limit from 100kW to 10kW, and
- ii) Options to reduce the scheme's costs

Reducing the eligible size limit from 100kW to 10kW

The CCA's proposal to reduce the size of systems eligible for the SRES seems both premature (given the very small proportion of non-residential systems given in Table 11 of the Discussion Paper), and somewhat arbitrary.

While commercial-scale systems benefit from economies of scale, they also offset electricity at a lower retail tariff and have more complex and expensive connection requirements. Adding LGC compliance costs would of course reduce financial viability. Thus, while there is certainly potential for increased PV installation in this market, it is by no means assured, and pre-emptively reducing policy support may kill the commercial market before it even gets started. Regardless, assuming that some form of cost control is applied to the SRES, for example the 1.5% rule discussed below, this would act to limit uncontrolled uptake of commercial-scale systems, and so a reduction of the eligible size limit would be unnecessary.

If a size threshold is to be chosen, it may be more logical to base it on the 30kVA limit for standard grid connection under AS4777, after which specific voltage and frequency protection is required.

Regarding alteration of the deeming period for ‘larger’ systems, it is unclear what size systems this would apply to. Does it mean that larger systems still in the SRES might not be deemed, or does it mean that larger systems outside the SRES might remain deemed? For simplicity’s sake it seems most logical to allow all systems within the SRES to have the same deeming rules. If systems above a certain size (eg. 30kW) are excluded from the SRES, allowing deeming above this size up to 100kW could help avoid the selected limit becoming such an artificial barrier. Such deeming could possibly be in 5 year increments over the life of the system, although see below our recommendation that no system be eligible for RECs after 15 years.

Finally, commercial-scale systems should always have the option of opting out of the SRES and into the LRET if they choose to do so. This would allow them to move out of the SRES should it be too restrictive, yet remain ‘capped’ through the LRET target.

Options to reduce scheme costs

The CCA Paper discusses three mechanisms to contain the costs of the SRES: i) placing a GWh cap on the scheme, ii) reducing the certificate price cap, and iii) reducing the solar multiplier.

The following doesn’t comment on the appropriateness of these approaches, but instead on the mechanism used to determine whether they should be applied. This is because we believe that if the trigger mechanism is designed and applied fairly, it is likely that none of these cost containment approaches will be triggered. In addition, as is clear from many of the submissions quoted in the Discussion paper, that the State based feed-in tariffs which drove much of the high PV uptake over the past 2 years have now ended, while the Solar Credit multiplier mechanism will end in June 2013 and world PV prices are not expected to drop significantly in the near future, so the level of PV uptake is also expected to stabilise from now on, driven mostly by electricity price increases.

The CCA’s Discussion Paper makes it clear that it is the scheme’s cost to the consumer that is of most concern. Thus, the most direct way for cost containment to be addressed is by using indicators most directly related to the affordability of the scheme. Any criteria based on system payback period or the net cost of systems to the purchaser are therefore inappropriate as they are not directly related to the cost of the scheme to electricity consumers generally. In addition, discriminating in these ways is a form of ‘exclusion banding’ as it would be restricting the most cost-effective technologies from contributing to the renewable energy target, and thereby serving to increase the overall scheme cost to electricity consumers. As stated on page 93 of the Discussion Paper:

“...one of the core features of the RET certificate scheme is to bring forward the most cost-effective renewable energy generation...” (page 93)

Further, given the range in system costs, amount of electricity generation between systems at different sites and differences in electricity tariffs across the country, the variation in payback period and the net cost of systems between households would all but make them meaningless as reliable indicators of cost effectiveness.

The ‘1.5%’ criteria could be fair but only if designed appropriately. Given that it is meant to focus on the cost impact to the electricity consumer, it should include all costs and benefits, including the suppression of wholesale electricity prices and reduction in line losses – both of which are acknowledged by the CCA to reduce overall electricity costs.

The average customer’s bill used as the basis for the 1.5% calculation should also include all costs, including the service availability charge, the energy cost, the transmission and distribution cost, the

retail margin and the 'green' charges, as these are all an integral part of the electricity bill and pay for services required for electricity to be delivered.

The CCA's rationale for a 'one-way downward ratchet' is that the RET is meant to be a transitional support measure. However, the use of a 'two-way ratchet' does not mean that support will not be transitional. It just means that if the cost impacts of PV on the scheme fluctuate over time (for example, a fall in the AUD exchange rate to levels more typical of those seen prior to the past 2 years, could significantly increase system costs and hence reduce installation rates), support for PV can be adjusted accordingly. The requirement for the scheme to be transitional can continue to be managed at the scheme level.

Based on the CCA's cost projections (which as above, do not include the cost reduction benefits of PV deployment), introduction of the 1.5% criteria in 2013/14 would mean that the multiplier would be reduced to less than 1 at that time, despite the fact that this would be the only year from then on that the 1.5% limit would be exceeded. The scheme costs as a percentage of retail costs drops to 1.4% by 2015/16 and continues to drop thereafter. It would appear to be over-reacting to reduce the multiplier to below 1 and create significant uncertainty for the purpose of dealing with a possible 0.01% over-shoot for one year.

Regarding the formula proposed by Ai Group for determining whether the solar multiplier should be decreased, it relates to neither the cost of the scheme nor the size of electricity bills, so it is difficult to see how it satisfies the CCA's requirements. In addition, as discussed above, the significant variation in PV prices and electricity tariffs across the country would make it difficult to determine the 'average' or typical numbers to choose. The Ai Group formula also depends only on the retail price. Given that many residential tariffs are regulated, this may not reflect actual electricity costs. It also means that if, from one year to the next, electricity prices increase (for whatever reason, which is when people will want to be able to install PV to hedge against rising prices) there will be downward pressure on 'A'. Importantly, this downward pressure will occur as electricity costs increase and hence when the SRES would make up a smaller proportion of bills.

Minor points

The Discussion Paper requests information regarding "changes to the RET that could lower overall costs and ensure they are equitably distributed" (page vi). Although we understand this is outside the CCA's zone of influence, and the point has been made before, it is important to make clear that jurisdictional regulators should base the regulated retail tariffs on the actual costs of SRES compliance, not the \$40 Clearing House price.

Regarding SWHs, the Discussion Paper states (page viii) that:

"However, in the event that a national white certificate scheme were ever implemented, all displacement technologies should cease to be eligible under the RET, and should transfer to the white certificate scheme."

An important caveat here is that the white certificate scheme should be well functioning and provide similar financial incentive to install displacement technologies (such as SWHs).

The Discussion Paper also states (page viii) that

"preliminary view is that the requirement to provide data on the out-of-pocket expense for a small generation unit installation should be removed from the REE Act, reducing overall administration and compliance costs" ..

The APVA agrees with this proposal, because this is not relevant to the cost of the scheme to electricity consumers. However, we note that it is counter to some of the cost reduction methods proposed, which would seek to track system costs, regardless of resultant costs to electricity consumers.

Additional points for consideration

As discussed in the original APVA submission, the APVA would support the introduction of a maximum period of 15 years for any project to receive RECs, whether via SRES or LRET. This will provide a fair limit to the support available to any one project and open up the market to new projects, at no extra cost to the scheme. This issue will become increasingly significant over the coming years, as many original projects will reach the 15 year limit.

Discussion of an increased target post 2020 should begin now, so that a clear decision can be made at the 2016 review. Prospects of a larger target will buoy the market in the meantime, while all aspects of the new target will have plenty of time to be considered before a decision is made in 2016.

Attachment A:

Background on the APVA

The APVA is an association of companies, government agencies, individuals, universities and research institutions with an interest in solar photovoltaic electricity. In addition to Australian activities, we provide the structure through which Australia participates in an International Energy Agency (IEA) programme called PVPS (Photovoltaic Power Systems), which in turn is made up of a number of activities concerning PV performance and implementation. Further information is available from www.apva.org.au.

APVA Objective

The objective of the Australian PV Association is to encourage participation of Australian organisations in PV technology and industry development, policy analysis, standards and accreditation, advocacy and collaborative research and development projects concerning photovoltaic solar electricity.

APVA membership provides:

Information

- Up to date information on new PV developments around the world (research, product development, policy, marketing strategies) as well as issues arising
- Access to PV sites and PV data from around the world
- International experiences with strategies, standards, technologies and policies
- Australian PV data and information
- Standards impacting on PV applications

Networking

- Access to international PV networks (PV industry, government, researchers) which can be invaluable in business, research or policy development or information exchange generally
- Opportunity to participate in international projects, with associated shared knowledge and understanding
- Opportunity to meet regularly and discuss specific issues which are of international, as well as local interest. This provides opportunities for joint work, reduces duplication of effort and keeps everyone up to date on current issues.

Marketing Australian Products and Expertise

- Opportunities for Australian input (and hence influence on) PV guidelines and standards development. This ensures both that Australian products are not excluded from international markets and that Australian product developers are aware of likely international guidelines.
- Using the information and networks detailed above to promote Australian products and expertise.
- Working with international network partners to further develop products and services.
- Using the network to enter into new markets and open new business opportunities in Australia.

The International Energy Agency PV Power Systems Programme (IEA PVPS)

One principal activity of the APVA is to manage Australian participation in the PVPS Programme. This work is arranged by Tasks, each with its own commitments of time and resources. Support is provided by the Australian Solar Institute. At present Australia participates in:

Task 1: PV Information Exchange and Dissemination

Task 13: PV System Performance

Task 14: High Penetration of PV in (Smart) Electricity Grids

and maintains an interest in:

Task 8: Very Large-Scale PV Systems

Task 9: PV in Developing Regions

Task 12: Environmental Health & Safety for PV Systems

For further information on the Australian PV Association visit: www.apva.org.au

For further information on the IEA PVPS Programme visit www.iea-pvps.org.