

Dan Sturrock

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APVI RESPONSE TO THE ARENA PUBLIC CONSULTATION ON THE PROPOSED LARGE SCALE SOLAR PV COMPETITIVE ROUND

Dear Mr Sturrock

The Australian PV Institute welcomes the opportunity to provide feedback on ARENA's **Large-Scale Solar PV Competitive Round** consultation paper.

The APVI is an association of companies, government agencies, individuals, universities and research institutions who work together to support the increased development and use of PV via research, analysis and information. In addition to Australian activities, we provide the structure through which Australia participates in the International Energy Agency (IEA) PVPS (Photovoltaic Power Systems) and SHC (Solar Heating and Cooling) programmes, which in turn are made up of a number of activities concerning PV and solar system performance and implementation.

While Australia has a leadership position in the uptake of residential PV, experience with commercial and large-scale deployment is limited and the APVI welcomes the ARENA initiative to support project development in this space to complement ongoing and new initiatives in commercial, regional and remote area deployment of renewables.

Merit Criteria

100% of electricity from solar PV

The APVI strongly supports the criteria that the projects must generate 100% of electricity from solar PV.

Minimum Project Size Limits

The APVI suggests that ARENA consider removing the lower limit and allowing projects to bid at smaller levels, provided that they remain grid-connected and demonstrate local competitiveness.

Given Australia's unique grid, PV offers potential for capacity support and grid voltage support at project sizes less than 10MW, that can be more effective and useful than large capacity and improved power quality at higher generation levels in other locations.

Smaller project sizes, while potentially having higher project costs per MW, are faster to negotiate and deliver, are more likely to be located close to demand and have lower project risk.

Eligible Locations

While the APVI acknowledge that this project targets grid-connected and that 'behind the meter' projects are not eligible, we suggest that mini grid and remote grid projects should be eligible and the constraint that the project must be connected to the National Electricity Market (NEM) or the South West Interconnected System (SWIS) may be too restrictive.

ARENA's proposed timetable

The APVI supports the timely deployment of competitive PV technologies. Residential PV installations have been proceeding at 800-1000MW/annum, with approvals taking on average 55 days from concept to completion. An increasing number of commercial projects are in progress (estimate 200MW to occur in 2015), taking around 6 months from concept to completion (in 2014), while the 150 MW Solar Flagships project took over 5 years from concept to completion.

The APVI recognises that the times from concept to completion reflect the competitiveness, the maturity of the market and the perceived risk. We expect that only proponents with mature project concepts and experience in the space will participate in the EOI. The APVI encourages ARENA to target reduced turn-around time for project delivery as an outcome and anticipates that smaller project sizes will improve this metric (due to the reduced risk).

Recognising that ~200MW of commercial PV is expected to be installed in 2015 alone, we encourage ARENA to build on the mature contract management processes to support project proponents to deliver timely outcomes for the proposed 100M AUD commitment.

LCOE and Commercial Competitiveness

The APVI welcomes the key metric of commercial competitiveness but cautions on a heavy reliance on the Levelised Cost of Electricity (LCOE). LCOE reflects capital costs, discount rates and expected energy yield which, while useful, is limited in determining commercial readiness. Commercial competitiveness relies on net expected returns and depends on electricity pricing, in particular time of use pricing. As examples,

- systems installed with optimised orientation and/or tracking can increase the market revenue at a lower MWh/MWp
- systems installed at network constrained areas can mitigate peak load limitations and offer greater network value than the LCOE alone.

Knowledge Sharing and Capacity building

Given the significant commitment of public funds to large-scale solar, projects must be required to make data available for research and educational purposes. The APVI encourages ARENA to review the knowledge sharing outcomes from the Solar Flagships program and consult with the education and research community on opportunities to leverage the commitment to large scale solar.

Thank you for this opportunity to provide feedback and APVI looks forward to providing further input for this.


5 August 2015

Renate Egan

Chair, APVI