

Department of Economic Development, Jobs, Transport and Resources,  
Victoria,  
Australia

31 August 2016

Dear Sir/ Madam,

**RESPONSE TO VICTORIAN RENEWABLE ENERGY AUCTION SCHEME**  
**Consultation paper**

Reach Solar energy (Reach) is very pleased to provide its comments on the proposed Victorian renewable energy auction scheme (attached in Annex A). Reach is excited about the opportunity provided by the Victorian Governments (Government) announcement and, although its lead site is a 300MWac 1-axis tilting solar PV development in South Australia, Reach is accelerating its large-scale solar PV development plans in Victoria. Its intent is to develop 200 to 300MW by 2020 based in Victoria and provide a competitive tariff using large-scale solar PV technology.

Reach management (Annex B) have a proven track record with energy and infrastructure development both in Australia and internationally, including the use of project finance.

**In summary:**

Contrary to the comment made in the consultation paper, capacity payment structures can work more effectively for renewable projects including solar PV largely because the short-run marginal costs are near zero. We have provided references to recent international renewable auctions where this has been successfully done namely:

Abu Dhabi - Sweihan Solar IPP:

<http://www.thenational.ae/business/energy/first-solar-enel-and-edf-among-elite-bidders-for-abu-dhabi-solar-project>

Dubai Solar IPP:

[http://www.tradearabia.com/news/OGN\\_309447.html](http://www.tradearabia.com/news/OGN_309447.html).

Alternatively, a contract for difference arrangement can be adopted and suggestions have been made on this structure as well as including deemed generation for transmission constraints and/ or negative spot price events.

Reach favours the sale of all non-firm renewable electricity and large-scale generation certificates (LGC's) to the Government for the term of the contract. Reach consider a contract term of 20 to 25 years will attract the lowest cost finance.

An auction tranche of greater than 500MW+ is preferred by Reach.

What is generic to both payment structures is the treatment of transmission constraints and these are expected to become increasingly real if the 2020 and 2025 targets are to be met. Reach anticipates the necessary grid infrastructure augmentation will lag generation (the lead time for the Heywood interconnector

is a recent example of this), and therefore a transition period is proposed (say 10 years) where this risk is borne by the Government (not the project(s)).

Reach prefers an incentive rather than a penalty and suggests no minimum volume (as this will increase costs and hence a higher tariff), and no cap on volume (stifles innovation from generation capacity). There are offtake precedents with retailers which do not contain either feature (for the reasons given in brackets).

I hope this is of interest to the Victorian Government and please do not hesitate to contact me if you have any questions on the same (0416 490 393 or [tony@reachsolarenergy.com.au](mailto:tony@reachsolarenergy.com.au)).

Yours sincerely,



Tony Concannon  
**CEO**

Encs:

Annex A:       Comments on Consultation paper principles

Annex B:       Reach Solar energy management

## **ANNEX A**

### **Using Consultation paper headings**

#### **Scheme Structure**

Maintaining a pipeline of development projects is key. The need to preserve some flexibility for the Victorian Government to adapt is prudent and understandable. This should not however change in law the contracted terms once project documentation is secured.

Reach agrees with the proposal to:

- a. fold the pre 2020 into the existing RET scheme and to surrender LGC's post 2020 from the RET scheme; and
- b. Hold a proportion for solar projects although Reach anticipates that large-scale solar PV is becoming increasingly competitive with wind and gas-fired generation. Reach expects large-scale solar PV to secure more than the 20% mentioned with a 2025 time horizon.

Reach favours selling all electricity and LGC to the Government (although it can arrange on-sale of LGC if required).

Reach considers large-scale solar PV requires capacity tranches of 500MW to be economic with wind.

#### **Payment structure**

Reach considers both a contract for difference, or a capacity offtake arrangement, can be structured such that the risk allocation is clear and it attracts global capital for investment.

#### **Capacity option**

The consultation paper suggested a capacity arrangement would not meet the needs of project finance but this is not our view.

The concept is that renewable capacity is contracted and a capacity charge is paid irrespective of generation. The capacity charge could be set at the equivalent of the "strike price" for both intermittent electricity and intermittent LGC's produced. It could also be designed such that the project is incentivised to perform (i.e. reward) when electricity market prices are high.

Availability tests are periodically applied. This has been used for both fossil-fired and renewable generation capacity globally.

Recent examples of capacity-based offtake and auction renewable generation processes are \*\*\*. Both were successful in raising material competition and capital.

#### **CfD option**

The CfD structure can also be designed to work. A two way CdD design as described in the consultation paper is envisaged by Reach.

The key risks are power evacuation (transmission constraints), and despatch risk (demand).

If a CfD option is selected by Government then Reach prefers half hour by half hour settlement and not a monthly average NEM price.

The rationale for a NEM floor price of zero is understood.

Energy delivered works well in an energy-only NEM but transmission risks remain (as mentioned above).

### **Ancillary services**

The ancillary services market was introduced in 2001. It has three services (a) frequency control (FCAS), (b) network support and control (NSCAS), and (c) system restart (SRAS). Service (a) is a true “market” and has an objective to maintain the NEM frequency within a tolerance at 50Hz.

Reach anticipate ancillary services will become more valuable in the future and renewable projects can do more to assist with grid stability but at an additional cost (say called “**enhanced services**”). If the enhanced services are contracted for the term of the offtake then this enables a return on the additional capital invested e.g. use of energy storage). Deemed generation provisions should apply if the project is part-loaded by AEMO to provide such enhanced services.

### **Transmission and network infrastructure**

The transmission system in Victoria is strongest from the Latrobe valley to Melbourne for historical reasons (source of the coal). Renewable generation sites are located in mid to the North of Victoria where the transmission system is less strong.

Transmission (and marginal loss factor) risk will be a key consideration for investors and banks. It is recommended the Government take transmission risk (i.e. provide deemed generation or capacity payments) for say 10 years for the network to catch-up.

### **Contracting elements**

A term of 20 to 25 years is ideal to secure favourable, low-cost terms from international and Australian lenders.

Termination clauses will be carefully reviewed by investors and banks to ensure there are no “hair-triggers” and no risk of “cancellation for convenience”.

The concept of a minimum generation and a cap on volume produced is not recommended by Reach. It will effectively bake-in a higher cost in the tariff and will stifle innovation to squeeze more volume out from the generation capacity.

### **Scheme Administration and cost recovery**

Reach acknowledges there is a track record of cost recovery. Reach prefers cost recovery via the transmission business due to the rationale presented in the table.

Reach has some innovative ideas post the contracted period but it will reserve these for the auction as it can add value to its submission.

**Auction Evaluation principles**

Reach would rank the proposed auction criteria in the following order of preference (number 1 being the most important):

1. Value for money
2. Electricity transmission network interactions
3. Economic development
4. Contribution towards Victoria's targets
5. Timely construction and operation
6. Community engagement
7. Wholesale market participation

End