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To whom it may concern

EnergyAustralia submission on the Victorian Renewable Energy Auction Scheme Consultation Paper

EnergyAustralia welcomes the opportunity to make a submission on the Victorian Government's Renewable Energy Auction Scheme Consultation Paper.

EnergyAustralia is one of Australia's largest energy companies, providing gas and electricity to 2.6 million household and business accounts across the National Electricity Market (NEM) with a diverse generation portfolio of coal, gas and renewable assets.

We make this submission as a current generator in the Victorian wholesale electricity market and renewable developer, but most importantly we make submission as a representative of our 500,000 Victorian electricity customers who will pay the cost of meeting the Government's ambitious targets.

As a major supplier of electricity and gas, EnergyAustralia is committed to transitioning Australia's energy sector to lower emissions, without compromising the delivery of reliable and affordable energy to customers. This needs to be done in a gradual and orderly way, to avoid the risk of price and reliability shocks to customers. There is an opportunity for government and industry to manage the transition to cleaner energy together and we would welcome the opportunity for further collaboration on this important issue.

However, we remain concerned that the Victorian government is not acknowledging the impact this ambitious renewable target will have on the viability of some older coal-fired generation and ultimately the impact their eventual exit will have for electricity customers.

Brown coal provides around 84% of Victoria's electricity, moving to 40% renewable energy will lead to the closure of Latrobe Valley generation.

These issues are likely to be exacerbated by the recent decision to ban all onshore gas development. Victoria will need more gas-fired generation to balance increases in intermittent renewable energy. Without new sources of gas, energy prices will rise and reliability will be threatened.

EnergyAustralia supports the reduction of emissions with minimal cost to consumers. Renewable Energy Targets are not the most efficient way to reduce emissions. However, within the terms of the Consultation Paper provided, EnergyAustralia has sought to provide balanced advice to the Government on how it may wish to think about designing its Renewable Energy Target. The key being consideration by the Government of its position on the continuum between the Government's appetite for risk and ensuring projects are bankable.

At one end of the spectrum the Government could take on all the risks and guarantee a price to developers and become a trader of renewable energy certificates. This may seem attractive while LGC prices are high, but overtime as more renewable energy projects are built prices may fall, increasing risk and costs to consumers.

At the other end of the spectrum the Government could provide a simple top-up-payment to the wholesale and LGC market prices a developer is able to trade or contract through a PPA, but this may not overcome the financing challenges of renewable projects.

EnergyAustralia believes there is a contracting model that effectively balances these risks, while ensuring projects "bankability" to deliver the competitive tension needed to get the lowest cost projects away first. This model is outlined in our submission and Attachment 1 includes individual responses to questions asked in the Consultation Paper.

For further information on any issues raised in this submission please contact

Regards

Jack Kotlyar
Head of Reputation

EnergyAustralia submission to the Victorian Renewable Energy Auction Scheme

About Us

EnergyAustralia is one of Australia's largest energy companies, providing gas and electricity to 2.6 million household and business customer accounts in NSW, Victoria, Queensland, South Australia and the Australian Capital Territory. EnergyAustralia owns and operates a multi-billion dollar portfolio of energy generation and storage facilities across Australia, including coal, gas and wind assets with control of approximately 4,500MW of generation in the National Electricity Market (NEM).

EnergyAustralia is the only vertically integrated energy retailer headquartered in Victoria with over 1500 employees across metropolitan Melbourne and regional centres in Gippsland and Geelong.

We have invested over $1 billion in renewable energy and underpinned approximately 14% of the large scale wind farms in the NEM. Our renewable energy investments deliver enough energy to power 200,000 homes annually.

We also give consumers the opportunity to support renewable energy through the purchase of *Greenpower* or installing solar PV or batteries at their homes or businesses. EnergyAustralia is the 3rd largest provider of *Greenpower* with over 30,000 customers and has helped over 135,000 enjoy the benefit of solar PV.

EnergyAustralia has the potential to capture Victoria's best solar resource and develop one of the State's largest solar farms at Mallee Solar Park, located south of Red Cliffs in north western Victoria. The project is ideally located and has the necessary planning approvals and local support to enable a fast build time. If realised, the project could create over 200 direct jobs and provide ongoing economic benefits to the Mallee community.

The VRET scheme in the national climate change context

As a major supplier of electricity and gas to Australians, EnergyAustralia is committed to transitioning Australia's energy sector to lower emissions, without compromising the delivery of reliable and affordable energy to customers.

Leading this change will require a coordinated approach across all levels of government. It will also require collaboration with business and a stable and evidence-based policy framework that enables private capital to invest in this transition. State-based renewables schemes do not fit with this approach.

Analysis by the Productivity Commission[1], the Grattan Institute[2] and the Expert Panel who reviewed the National Renewable Energy Target (RET)[3] has identified renewable subsidies as a costly means to reduce carbon emissions. The Productivity Commission assessed the emissions abatement cost large scale renewable targets in Australia to be $37-111/tCO2 and higher than emissions trading schemes at an abatement cost of $14-23/tCO2[4].

[1] Productivity Commission, 2011, *Carbon Emission Policies in Key Economies*
[2] Grattan Institute, 2015, *Sundown, sunrise: How Australia Can Finally Get Solar Power Right*
[3] *Review of Renewable Energy Target Scheme*, August 2014 Licensed from the Commonwealth of Australia under a Creative Commons Attribution 3.0 Australia Licence. The Commonwealth of Australia does not necessarily endorse the content of this publication.
[4] Productivity Commission, op.cit. p. XXVIII

We consider that the Victorian Renewable Energy Target (VRET) scheme will place an additional unnecessary cost on Victorian consumers and may place Victorian businesses at competitive disadvantage as they face higher electricity bills as the result of the Victorian Government's policy over the longer term.

Our preference is for national coordinated emissions reduction policy.

The Victorian Government should continue to complement national policy with initiatives such as the *New Energy Jobs Fund* to help encourage and develop innovative design in energy technologies. This approach helps to build Victorian competitive advantage and capability without distorting the NEM or the RET.

A principled approach to auction design

Our comments above notwithstanding, should the Government choose to continue with its 2020 and 2025 renewable energy targets EnergyAustralia recommends that it take a principled approach to designing the enabling auction mechanism. In such a complex market this will help the Government be sure the policy will deliver long term positive outcomes for Victorians.

We support an auction mechanism that is:

- Least cost;
- Effectively balancing risk;
- Bankable;
- Flexible; and
- Transparent.

Each principle is discussed further below.

Least cost – Given costs associated with meeting the VRETs will be recovered from Victorian consumers (most likely via electricity bills) it is imperative that those costs are minimised to the largest extent possible. This should apply to the auction mechanism chosen and administration of the scheme.

Balanced risk allocation **–** As with any subsidised industry, the risk of policy change remains an ongoing factor in the decisions of renewable energy investors (both developers and energy retailers). The National RET, which places risk management responsibilities on market participants, is at one end of the policy spectrum, whilst the ACT reverse auction scheme, which guarantees a $/MWh price for a contracted period, is at the other end of the spectrum. The Government should implement an auction mechanism that effectively balances risks between a range of parties (including itself) to ensure that renewable projects can be built without placing unnecessary costs on Victorian consumers.

Bankable – The banking and finance sector place strict provisions on renewable energy projects to minimise their exposure to risk that often impede their development. Banks do not have an appetite to take on the market or change-of-law risks, retailers and project proponents may be prepared to manage and can often force projects to seek contractual arrangements with guaranteed returns in order to gain finance. Any auction model needs to be mindful of a projects ability to attract finance, while also minimising risk to government.

Scheme flexibility – History should be a useful guide to the Government in how it designs the VRET scheme. The scheme should have flexibility built into it to allow for changing circumstances, such as changes in the Victorian electricity market or the

Federal RET. This flexibility should be complemented by a designated review point to consider if the policy is still appropriate and/or if any recalibration is necessary.

Transparency – Development and administration of the auction process should be undertaken in a transparent manner to give stakeholders confidence to make bids and provide visibility of project development post awarding of contracts. This principle should also apply to the policy underpinning the scheme and could be demonstrated by the Government publishing the modelling which informed its targets.

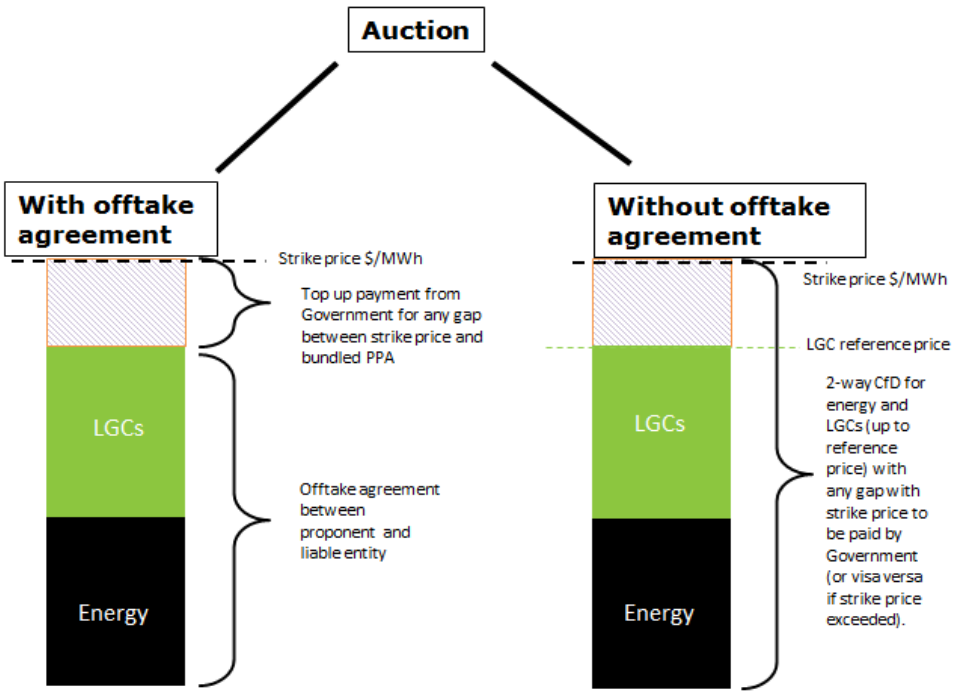
Our recommended contracting model

Consistent with the principles outlined above, EnergyAustralia recommends that the Government implement a single auction process that lowers the risk to government in developing the lowest cost renewable energy projects. The auction process should therefore rank projects according to their strike or exposure price (strike price minus any PPAs) and the length of the agreement.

This can be done by creating two assessment streams (see *Figure 1.*):

1. Stream 1 would rank projects that require only a top-up payment for any gap between the strike price and any offtake arrangements they have such as a PPA or merchant price forecasts. Projects in this stream should be ranked in order of lowest exposure price, giving the Government the option to prioritise contacting with these projects because they lower the market risk to the Government (and therefore costs to consumers).
2. Stream 2 would rank projects that require a two-way Contract for Difference (CfD) for any gap between the strike price and the sum of the half-hourly wholesale spot price and a Large-scale Generation Certificate (LGC) reference price or LGC sale price (whichever is the greatest). Projects in this stream should be ranked in order of lowest strike price, giving the Government the option to place them as a second order priority to stream 1 projects as they involve transferring greater risk to government and electricity consumers.

Figure 1: Recommended Contact Model



We recommend that the Government establish a visible market price as the LGC reference price to calculate any CfD payments[5]. . Proponents who monetise LGCs below the reference price should only be compensated up to the reference price. This approach incentivises project proponents to sell LGCs at a market reflective price and provide a mechanism for government to reduce its exposure risk.

At all times when designing the auction process, the Government should be conscious not to create market distortions in the electricity wholesale market or LGC market which may needlessly impact business investment decisions and reduce the ability to meet the State and/or National RETs.

One of the current challenges facing the National RET is the short-term contracting preference of the Commercial and Industrial (C&I) sector, which represents a large outstanding Renewable Energy Certificate (REC) liability. This liability is mostly being met by retailers buying LGCs on market to cover the relevant contact term. This challenges the long term certainty required for renewable projects to be built. In our proposed model there is the potential under Stream 1 for developers to contract with liable entities (which includes C&I customers) for a period of the contract term.

We would welcome the Government considering any other opportunities to reduce some of the uncertainty relating to C&I REC liabilities as part of its assessment criteria because a well-functioning RET scheme is important to making sure the VRET scheme is successful.

Contracting model rationale

The Consultation Paper clearly outlines four key elements if the VRET scheme is to meet its objectives:

- Attract sufficient market interest to participate in the auctions and allow Government to meet its targets;
- Minimise scheme costs;
- Drive industry development and jobs in the State; and
- Ensure ease of administration.

Consultation sessions held by the Department reinforced these elements with emphasis on getting projects built to drive industry development, investment and jobs in the State.

By prioritising projects in which proponents are willing to manage more market risk the Government can minimise its own exposure to risk and ensure the most bankable and least cost projects are contracted first. This approach also creates a competitive tension that encourages projects to continue to find ways of managing market risk themselves, rather than simply passing all the risk to the Government.

In our view this approach has several benefits:

- It provides multiple options for proponents to secure the necessary certainty to finance projects and get them built;
- It will get the best projects built first with little (or possibly) no cost to consumers;
- It explicitly recognises and rewards proponents willing to manage more market risk and therefore reducing government (consumer) risk;

[5] As an example, the Australian Financial Markets Association (AFMA) currently publishes a weekly average LGC price based on information provided by members, however we understand this price will not be published from the end of September 2016. The Government may wish to discuss the ability to extend publication of the reference price with AFMA,

- It provides known costs to the Government for at least part of the scheme which helps with scheme planning and administration
- It provides an incentive for proponents to contract directly with liable entities which may reduce uncertainty around future C&I REC liabilities; and
- It is relatively simple to administer and does not require the Government to retain and/or sell certificates pre 2020 which it is not currently equipped to do.

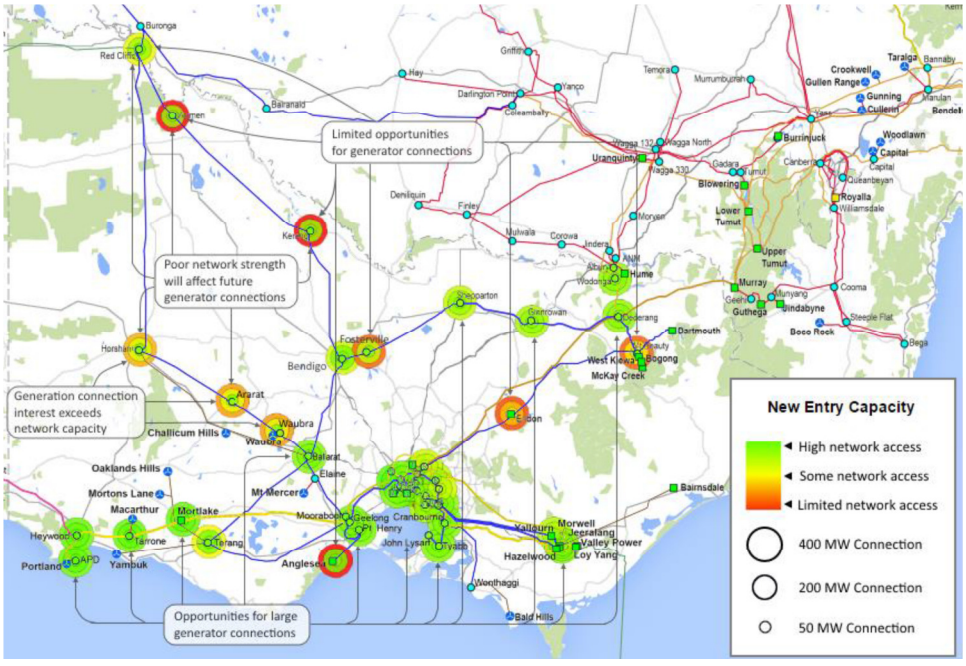
Transmission risks

The VRET is expected to install the equivalent of 1800MWs of new renewable generation by 2020 and a further 3600MWs by 2025 - totaling 5400MWs. Given the majority of renewable projects are expected to be built in west and north-west Victoria, where the wind and solar resources are greatest, there is the risk of transmission congestion limiting the quantum of delivered electricity projects can get to market and therefore their commercial viability.

These projects will largely connect into the electricity grid using three key transmission lines - the 500kV line from Portland and the 220kV lines from Red Cliffs (near Mildura). Given the large numbers of projects connecting into the same transmission lines the risk of congestion may increase and will have an impact on the commercial viability of some projects.

As highlighted in Figure 2, AEMO is already considering some of these challenges and will commence a Regulatory Investment Test (RIT) later this year to consider whether further upgrades to the Victorian transmission network are necessary to cope with the additional stress.

Figure 2: AEMO Overview of Victorian Transmission Network[6]



[6] Nicola Falcon, AEMO, *The Electricity Sector is Evolving,* Presentation given at Australian Energy Week June 2016

Congestion risk is an issue that all projects face, however it is heightened by the number of projects aiming to be built in such a short time in a concentrated area. There is also the potential that existing generators along those lines (or projects that are built in the early part of the scheme) are disadvantaged by projects that are built later and cause/add to congestion. This risk will likely be reflected in auction bids.

Whilst we support the proposal that project proponents be paid for electricity dispatched multiplied by the project's marginal loss factor (MLF), we recommend that the Government consider including locational caps in areas of current or potential congestion to incentivise projects to be built in areas where network capacity is available. Any caps should be developed in cooperation with AEMO and made public as early as possible before any auction at which they are to apply.

Wholesale electricity market risks

As we have witnessed in South Australia, increasing penetration of renewable energy presents challenges for an energy-only market like the NEM. In July average South Australian wholesale prices were over $300/MWh, significantly higher than adjoining regions in New South Wales and Victoria ($80-90/MWh). This has resulted in double digit price increases for household electricity bills and up to 90% increases for businesses. Whilst we do not suggest South Australia's 41% renewables penetration was the sole cause for this situation, it played a role in two ways:

1. Increased intermittency during periods when winds were too low or too high.

2. Overall price suppression which impacted on the decision to close the Northern Power Station which provided baseload power generation in the State.

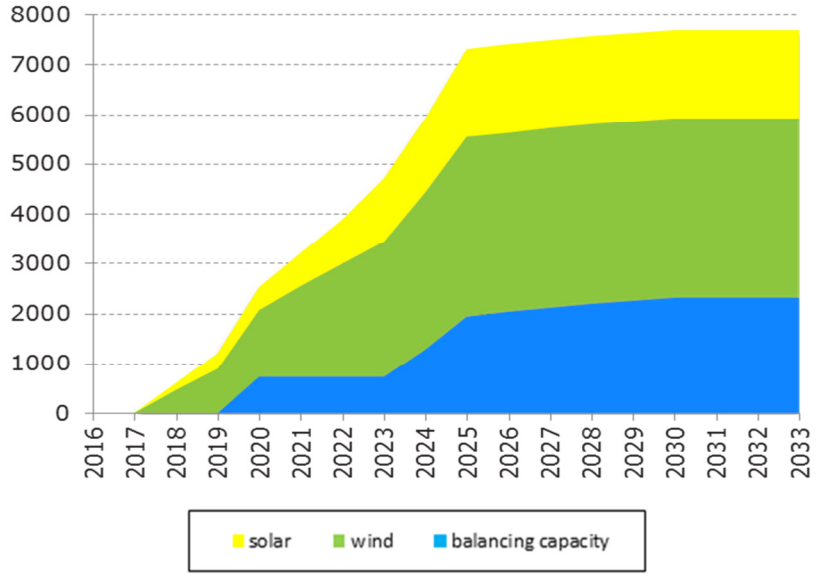
Other key factors which increased wholesale prices include a planned outage on the South Australia/Victoria interconnector and tightness in south east gas markets. It is foreseeable that the VRETs will have similar impacts to those experienced in South Australia renewables if integration is not carefully managed.

EnergyAustralia's expects that the VRETs will challenge the commercial viability of Victorian brown coal generation, which would reduce reliable generation in the State, increase price volatility and increase Victoria's reliance on gas and interconnection.

As generation from dispatchable sources (such as coal-fired power) is reduced this will increase the need for alternative "balancing" generation sources at times when renewables are not available. As shown in Figure 3, our analysis suggests the balancing generation required could be as high as 720MW of generation pre 2020 and 2000MW post 2025. This is the equivalent of between two and eight gas-fired power stations required if Victorian is to be self-sufficient.

Given the current high price of gas and the recent decision by the Victorian Government to ban onshore gas development, investment in any gas-fired generation is unlikely.

Figure3: New Victorian Generation Requirements (MW)[7]



It will ultimately be Victorian households and businesses that will bear the costs of the Government's policy. Not only will consumers pay for the VRET contracts for difference, but they will also pay higher wholesale prices as the result of changes in the Victorian generation mix follow exit of coal fired power. To mitigate against these risks EnergyAustralia recommends that:

- The VRET be legislated as a percentage of total generation output (ie. 25% by 2020). The Government could manage the fluctuations in MW requirements by varying the size of its auction tranches to reflect changes in the State energy mix and/or demand. This avoids the situation experienced with the Federal RET which was legislated as a fixed GWh target and was not flexible to adapt to falling demand; and

- A review of the scheme be legislated to occur in 2020 to consider the appropriateness of the 2025 target in the context of Victoria's energy mix at the time and an assessment of the future cost to consumers of the scheme when the Government will retain the LGCs from new projects.

- That the costs of the scheme (direct and indirect) are publicly reported on an annual basis to enable transparency and support future assessment of the policy.

[7] EnergyAustralia modelling