Redback Technologies is a technology company focused on the development of advanced, low cost solar solutions for residential and commercial users with market leading integrated hardware and software technologies capture, store and manage solar energy.

Redback’s streamlined inverter hardware and proprietary cloud based system puts power back in the hands of consumers with the ability to analyse and control energy generation and consumption in real time, giving our consumers the ability to reduce energy costs, without sacrificing comfort.

We appreciate the opportunity to participate in the Department’s review of state based energy legislation in a period of substantial energy transformation. The original drafting of current legislation could not have anticipated the changes that have occurred in the sector in the last decade.

Excitingly, customers are at the centre of this change. By 2050 it is estimated that millions of households and businesses will be responsible for $200 billion of investment in Australia’s power system infrastructure and supply up to 45% of Australia’s electricity needs. Despite this, existing legislative frameworks view these households and businesses as consumers of energy, rather than an important part of the future energy supply chain. Regulatory and legislative frameworks need to establish the incentives and protections to ensure consumers of energy and prosumers of energy – rather than incumbent supply chain participants – extract the greatest value from customer led energy transformation. Incentives for participation and innovation to allow this should be an important element of this review.

Our particular responses to the questions outlined in the Department’s Issues Paper are outlined below:

**Questions around objectives of legislation and interaction with other laws**

The objectives of state specific legislation should be to minimise any duplication with Commonwealth laws (including laws codified under a National Framework) unless there is a justifiable reason why Queensland needs something additional or different to national arrangements. These differences may be driven by government policy or particular topographic or environmental factors in Queensland that warrant a different approach.
We see the need for consideration of these differences as part of this review. For example, the existing legislation entrenches the disaggregated supply chain framework which applies nationally, separating competitive and regulated segments. However, Queenslanders in most of the state are subject to regulated retail tariffs and don't realise the potential benefit from disaggregated markets. At the same time they cannot benefit from more innovative solutions that would otherwise be achieved through vertical integration.

For instance, the existing framework compels standard customer connections or network services must be enabled through the interconnected grid. However, for many parts of Queensland, alternatives to grid connection, augmentation or replacement may result in a lower cost for customers, but cannot be delivered by the network service provider due to regulatory barriers. In addition, a large amount of cost is incurred to develop regulated network revenue outcomes for prices which very few customers see.

Western Australia, who is not subject to the same national arrangements, is seeing an upsurge in innovation and investment in remote locations, likely to deliver better reliability and pricing outcomes for customers compared to standard grid connection, augmentation or replacement decisions. This review should consider the benefits of moving to an approach similar to what occurs in Western Australia and how similar arrangements could be adopted to greater parts of Queensland.

Questions around energy efficiency and demand management

The challenges for the network in the previous decade centred around the network’s ability to manage changes to energy use from customers adopting new and cheaper appliances (particularly air conditioning) in the most efficient manner. While increasing peak demand will occur in some areas, a broader range of issues now need to be addressed. There is an opportunity through this review to ensure networks are properly incentivised to innovate and improve hosting capacity of distributed generation in their networks.

Analysis by the International Energy Agency last year reveals that Australia is one of the lowest funders of network innovation compared to other OECD countries which Energy Networks Australia attributes to a relative lack of positive regulatory incentive and funding.

This review should consider whether state based legislation could positively contribute to higher levels of innovation funding for networks so that they are able to partner with technology companies and deliver better outcomes for customers.

Yours sincerely

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Director of Market Development