



Essential Services Commission of South Australia (ESCOSA)

Response to the 2011-2014 Electricity Standing Contract Price Determination – Wholesale Electricity Cost Investigation

1. Background

First Solar is the world's largest and lowest cost manufacturer of solar photovoltaic (PV) modules. First Solar supplies proven thin film PV module products that have been deployed in over 6,000 MW of projects worldwide including many of the world's largest solar PV projects. First Solar is a vertically integrated organisation, with the capabilities to deliver every component of the solar development value chain with a focus on optimising cost, reliability and bankability. First Solar is at the forefront of utility-scale solar project construction in Australia, recently delivering on the 10 MW (AC) Greenough River Solar Project near Geraldton, Western Australia. The project is ten times larger than any other operating solar power plant in the country and highlights First Solar's capability to leverage its global project experience to deliver solar PV projects within Australia. First Solar currently has a global contracted pipeline of over 3,000 MW and is predominantly focused on the delivery of utility scale solar PV systems.

First Solar's Australian operations are headquartered in Sydney, with activities focused on market development, project development and project delivery. In 2012 First Solar was selected with AGL Energy to deliver 159 MW (AC) in utility scale solar PV projects in Western New South Wales under the Federal Government's Solar Flagships Program. First Solar has also demonstrated its support for the development of renewable energy policy within Australia, through direct engagement of key stakeholders within the renewable energy industry as well as active membership of leading industry organisations such as the Clean Energy Council and the Australian Photovoltaic Association.

2. Summary

First Solar is firmly of the opinion that investor certainty and stable policy commitment are the main anchors of a successful Large-scale Renewable Energy Target (LRET), and requests that ESCOSA continue to use the Long Run Marginal Cost (LRMC) in setting the retail price for standing contracts in South Australia.

Long term Power Purchase Agreements (PPAs) are critical to the development of the utility scale solar industry in Australia, and are seen as a key requirement of debt and equity providers looking to invest in new electricity generation. To recover the costs of a PPA, energy market participants will need to rely on a regulatory framework that allows long term cost

commitments to be passed through to ratepayers and avoids exposure to market price volatility. It is essential that ESCOSA recognizes the critical role that long term PPAs play in the development of renewable energy projects and the importance of long term revenue certainty to the local investment community.

If changes to market structures lead to a failure to reach the LRET target, it will lead to several undesirable consequences, including:

- I. **A less economically efficient renewable energy industry** - as money spent developing next generation renewable energy technologies will be foiled by the absence of a market bridge to bring technologies to commercialisation and maturity. This will limit the likelihood that non-wind renewable technologies are able to penetrate the conventional generation mix and improve the cost, profile and quality of supply;
- II. **An adverse impact on the environmental landscape.** A reduced LRET target will necessitate an increased amount of emissions from fossil fuels and constrain the development of increasingly environmentally friendly renewable energy generation. For example, utility scale solar PV projects are able to generate electricity with no moving parts, no water consumption and no emissions but will be unable to compete with conventional generators if demand for renewable energy is reduced; and
- III. **An inequitable outcome for companies that have invested in the Australian renewable energy market based on the existing target.** For example, First Solar established a presence in Australia in mid-2009, and has now invested significant capital in a localised engineering, procurement and construction team as well as an Australian supply chain capability. The decision to invest in the Australian market was directly linked to the nature and longevity of the LRET.

3. Conclusion

It is a generally accepted view, and one that has been exemplified in multiple jurisdictions, that unless a renewable energy policy is fundamentally flawed, it is highly preferable to maintain it in its current form than to amend it. This is especially the case given the long lead-times associated with originating, developing and constructing renewable generation. There are many examples where the dramatic alteration or winding back of a regulatory mechanism has resulted in the implosion of a renewable industry, often ensuring that it will take years for it to recover. For the development of utility scale solar energy projects in South Australia, it is critical that ESCOSA supports a market framework that allows investment certainty and encourages long term PPAs to be offered to renewable energy projects.