AUSTELA

Australian Solar Thermal Energy Association Ltd

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Dear Quentin

Australian Energy Technology Assessment 2012

Thank you for inviting AUSTELA to participate in the AETA Stakeholder Reference Group and for arranging the first meeting of the Group last Friday.

I understand your intention is that the Worley Parsons presentation made at the meeting will be circulated to members of the Group to enable us to provide feedback. I look forward to receiving the presentation as soon as possible.

In the interim, AUSTELA would like to make some high level observations in relation to the key assumptions to be adopted in modelling for the 2012 AETA:

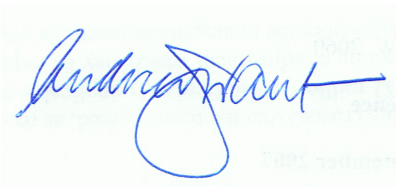
1. A sensible view of generating plant productive life (amortisation) must be taken which fairly represents the capital intensity of renewable energy technologies such as solar thermal facilities. A distinction must be drawn between the term of financing instruments for a generating asset and the useful life of the asset; assets are likely to be refinanced multiple times during their productive lives. 30 years is a minimum period over which a generating asset of utility scale will be expected to be productive. We submit the period to be adopted for all technologies should be 30 years (rather than 20) or the design life for the technology class, if less than 30 years.
2. AUSTELA strongly supports BREE's intention to develop the AETA model adopting, wherever possible, common assumptions across all technologies, and to make the model transparent and available online so that users can undertake their own sensitivity analyses. This approach, providing a common platform for basic LCOE comparison between technologies, should result in the AETA having durability and centrality in energy market and economic analysis. By eliminating from the base modelling much of the subjectivity typically applied in LCOE assessments, the AETA will enable a broad range of alternative assumptions and sensitivities to be modelled for different technologies over time; this will over time provide a much more nuanced view of the value of different technologies in different market circumstances.
3. It logically follows from this approach (2 above) that Worley Parsons should not seek to apply subjective adjustments to key inputs such as WACC, but should assume common WACC for all technologies. This will remove subjective assessments of project and technology risk and focus the LCOE assessment on the core attributes of the technology.
4. It is also consistent with that approach that common economic assumptions should be used for all technologies. AUSTELA proposes that, just as Treasury's projections are to be used for

carbon price projections, Treasury assumptions should be adopted for GDP growth, sectoral growth (where relevant, for example in relation to construction cost indices), wages growth, interest rates, foreign exchange and so on. Again, this will help to give the AETA durability, will eliminate subjectivity in relation to key economic data and should ensure that the AETA reflects Australian economic conditions, as modelled by Treasury, over time.

5. The issue of projected learning rates, and how these are to be reflected in the AETA, was discussed at some length in the Stakeholder Group meeting. This is clearly a vital issue for the AETA and its contribution to the Energy White Paper, and more broadly to energy policy and investment decisions in the coming few years. It is vital that the Stakeholder Reference Group has a proper opportunity to review and debate the assumptions Worley Parsons proposes to adopt in relation to learning rates, the statistical and historical bases for these assumptions and their applicability in an Australian context. AUSTELA notes that past studies used by DRET and other agencies have adopted implied learning rates in relation to renewable energy technologies – including solar thermal technologies - that have lacked transparency and have often been significantly at odds with international projections and experience and with previous Australian experience in energy and other technologies.[1]
6. LCOE is a blunt measure that does not reflect the more complex generation, distribution and consumption patterns of our modern electricity market. In particular, LCOE does not reflect the relative value of technologies in their ability to respond to peak loads and to reduce network augmentation costs – the two major cost drivers of retail electricity cost increases today. While there may not be time in the 2012 AETA to develop more nuanced measures to take these value issues into account in comparisons of energy generation technology, it is essential that these measures be developed, debated and implemented as the AETA evolves. AUSTELA submits that this should be expressly recognised in the AETA in 2012 and noted as an area to be addressed before the 2014 AETA.

AUSTELA is pleased to be able to contribute to the AETA. We look forward to working with you and with other Stakeholder Reference Group members.

Best regards



Andrew Want
Chair, AUSTELA

[1] For example, compare EPRI 2009 LCOE and capital cost projections with 'Assessment of Parabolic Trough and Power Tower Solar Technology Cost and Performance Forecasts', NREL/Sargent & Lundy 2009, and 'Power Tower Technology Roadmap and Cost Reduction Plan', Sandia Laboratories 2011.