Dissenting Report by Independent Senator Nick Xenophon

- 1.1 Australia, as a leading developed nation, has a responsibility not only to those of us who live here but as a global citizen in facing the challenges of climate change. An integral part of rising to this challenge is ensuring we are investing in emerging, efficient and cost effective renewable technologies.
- 1.2 The Australian Renewable Energy Agency, since its establishment in 2012, has funded a number of worthy renewable energy projects and feasibility studies. One such proposal is that of the Repower Port Augusta Alliance in Port Augusta, South Australia. The two coal-fire power stations in the area are nearing the end of their working life, leaving an enormous opportunity to remove these outdated and polluting 'dinosaurs' and replace them with modern solar thermal plants. According to the Repower Port Augusta Alliance's website:

This will create 1800 jobs, save 5 million tonnes of greenhouse gas emissions, improve the health of the local community and ensure energy security and stable electricity prices.¹

- 1.3 I pay tribute to the vision and hard work of the former Mayor of Port Augusta, the late Ms Joy Baluch AM in her advocacy for such a project.
- 1.4 The Repower Port Augusta Alliance's submission to this inquiry explained their project in more detail:

Concentrated solar thermal towers with storage is a game-changing renewable energy technology due to its ability to store and dispatch heat energy to provide on-demand baseload renewable energy, even when the sun goes down. Solar thermal towers operate by concentrating the sun's rays to the top of a tower with a field of heliostats (mirrors). This heat then heats up a storage solution such as molten salt which is then stored and dispatched to boil water, spin a turbine and create electricity... The technology works in a similar way to a traditional coal-fired power station except it replaces the traditional coal heat source with the sun. This similarity makes the skills used to operate a coal-fired power station easily transferable to the skills used in a solar thermal plant. This transferability of skills from coal to solar would be of huge benefit to the Port Augusta community, allowing jobs to be transferred from the ageing coal station with a projected life of 2027, into a new solar thermal power station. Creating this transition pathway is a responsibility of the Government and ARENA is a critical agency for achieving it.²

¹ Repower Port Augusta: a solar future for Australia, available at http://repowerportaugusta.org/, accessed on 3 September 2014.

² Repower Port Augusta Alliance, *submission 114*, p. 2.

1.5 While funds previously allocated by ARENA to these projects are safe, the Repower Port Augusta Alliance has pointed out that Australia lags behind other nations such as the US, Spain, South Africa and Chile in terms of solar thermal technologies. Its submission continued:

Despite Australia's world-leading solar resource, we are yet to realise the potential benefits that solar thermal can play in our energy market due to a lack of investment in the technology by the Federal Government. Ongoing policy uncertainty has further contributed to Australia's failure to realise the opportunity provided by the technology. ARENA has been playing a role in bringing this technology to Australia with the targeted funding of studies and demonstration projects. Abolishing ARENA or any cuts to its funding will severely hamper the introduction of this technology to Australia.³

1.6 In stark contrast to solar thermal technologies, the wind energy sector is highly developed in Australia, and indeed there is a concern that an over reliance on wind energy, given its intermittence and unreliability, has caused distortions in the electricity market. South Australia alone has over 30 percent of the nation's wind farms, a statistic some praise while other bemoan. Wind energy is unreliable and I am concerned that putting so much of our renewable energy investment and hopes in one basket we are forgoing the opportunity to invest in developing technologies. Further, there are widespread and legitimate community concerns about the impact of wind energy which must not be ignored. Indeed, a unanimous Senate Community Affairs Committee report's recommendations included:

Recommendation 1

The Committee considers that the noise standards adopted by the states and territories for the planning and operation of rural wind farms should include appropriate measures to calculate the impact of low frequency noise and vibrations indoors at impacted dwellings.

Recommendation 2

The Committee recommends that the responsible authorities should ensure that complaints are dealt with expeditiously and that the complaints processes should involve an independent arbitrator. State and local government agencies responsible for ensuring compliance with planning permissions should be adequately resourced for this activity.

Recommendation 3

The Committee recommends that further consideration be given to the development of policy on separation criteria between residences and wind farm facilities.

Recommendation 4

The Committee recommends that the Commonwealth Government initiate as a matter of priority thorough, adequately resourced epidemiological and laboratory studies of the possible effects of wind farms on human health.

Repower Port Augusta Alliance, *submission 114*, p. 3.

This research must engage across industry and community, and include an advisory process representing the range of interests and concerns.

Recommendation 5

The Committee recommends that the NHMRC review of research should continue, with regular publication.

Recommendation 6

The Committee recommends that the National Acoustics Laboratories conduct a study and assessment of noise impacts of wind farms, including the impacts of infrasound.

Recommendation 7

The Committee recommends that the draft National Wind Farm Development Guidelines be redrafted to include discussion of any adverse health effects and comments made by NHMRC regarding the revision of its 2010 public statement.⁴

- 1.7 It appears that both the former government and this government have not appropriately implemented these recommendations. In my view there should be a moratorium on wind farm development pending the implementation of these recommendations.
- 1.8 Therefore while I do not support abolishing ARENA I believe that no further Federal Government funding should be directed towards wind projects, given ARENA is intended to focus on new and emerging technologies. It is time Australia looked past wind and focused on some of our other natural resources like solar, tidal and geothermal reserves.

Recommendation

1.9 That ARENA continues subject to it not funding wind energy given the maturity of the industry and legitimate concerns over its community impact.

Senator Nick Xenophon Senator for South Australia

⁴ Senate Standing Committee on Community Affairs, *The Social and Economic Impact of Rural Wind Farms*, 23 June 2011.