



Australian Government
Australian Renewable
Energy Agency

ARENA

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ARENA submission to the Stand-alone Power Systems Review Draft Report

This submission seeks to draw your attention to the recently published *Australian Concentrating Solar Thermal (CST) Industry Roadmap*¹, prepared with grant funding from ARENA, which provides information relevant to the Stand-alone Power Systems review. The study includes information that was not available for inclusion in ARENA's response to the AEMC Issues Paper² and it builds on and reinforces some of the issues that we identified in that response.

In summary, the study findings relevant to this review were that -

- Utilising an optimal mix of technology (CST, PV, batteries and diesel), some communities would be able to leave the grid while maintaining current reliability standards and either maintaining or reducing customer bills, while increasing the reliability of the NEM.
- Being able to transfer network deflection/deferral cost savings to smaller distributed generators in fringe-of-grid locations could result in an additional 1.14 GW of CST between 2022 and 2040 across regional Australia, and unlock a \$1.1 billion reduction in consumer power bills.

Study recommendations relevant to the review include implementing a mechanism to reward distributed generators with a proportion of the network savings they produce as a cost-neutral incentive to accelerate the benefits of the deployment of CST and other DER technologies, particularly in fringe-of-grid distribution networks.

¹ <https://arena.gov.au/assets/2019/01/australian-concentrating-solar-thermal-industry-roadmap.pdf>

² https://www.aemc.gov.au/sites/default/files/2018-10/ARENA%20-%20181009_0.PDF

Overall, ARENA considers that current framework is not conducive to the development of a least-cost mix of generation and network infrastructure to service fringe of grid locations. The CST Roadmap presents modelling that illustrates the benefits to consumers, and regional communities, of reform in this area.

About ARENA

ARENA was established to make renewable energy solutions more affordable and to increase the supply of renewable energy in Australia.

ARENA provides financial assistance to support innovation and the commercialisation of renewable energy and enabling technologies by helping to overcome technical and commercial barriers. A key part of ARENA's role is to collect, store and disseminate knowledge gained from the projects and activities it supports for use by the wider industry and Australia's energy market institutions.

Please contact Jon Sibley, Principal Policy Advisor (jon.sibley@arena.gov.au) if you would like to discuss any aspect of ARENA's submission or the issues raised in the CST Roadmap.

Yours sincerely

Darren Miller

Chief Executive Officer, ARENA