



Australian Government
Australian Renewable
Energy Agency

ARENA

17 June 2021

James Hyatt
System Strength Draft Determination
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

GPO Box 643
Canberra ACT 2601
Tel: +61 2 9243 7773
ABN: 35 931 927 899
www.arena.gov.au

ARENA submission on the ‘Efficient management of system strength on the power system draft determination’

This submission provides insights from projects funded by the Australian Renewable Energy Agency (ARENA) as relevant to the AEMC’s current rule change consultation process.

ARENA is supportive of the suggested changes and welcomes the opportunity to make a submission to the process. The changes to the approvals process for new entrants should promote faster connections and take advantage of ever decreasing costs of new build renewables. This is likely to promote positive outcomes for consumers due to downward pressure on prices. ARENA agrees with the AEMC’s suggestion that overinvestment leading to headroom of system strength is more desirable than underinvestment, which leads to delays in connection processes.

A number of ARENA projects are actively exploring the way different technologies, including synchronous condensers and advanced inverters, can provide system strength services, in particular the Powerlink and Monash University studies.

The table below lists two ARENA-supported projects that are relevant to the provision of system strength and that we expect may be technically capable of participating in the AEMC’s proposed evolved framework for managing system strength.

Project name	Description
Monash University Stability-Enhancing Measures for Weak Grids Study	Researchers at Monash University will conduct a desktop study to explore issues and strategies associated with connecting inverter-connected plants such as batteries, solar, and wind into weak electricity grids. Initial results are due July 2021.
Powerlink Cost-effective system strength in North Queensland study	A study of enabling technologies to optimise the electricity supply system strength in north Queensland through building industry understanding of NEM rules, the connections process, and the local technical, economic and commercial considerations.

About ARENA

The Australian Renewable Energy Agency (ARENA) was established in 2012 by the Australian Government. ARENA's function and objectives are set out in the *Australian Renewable Energy Agency Act 2011*.

ARENA provides financial assistance to support innovation and the commercialisation of clean energy 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 Carl Tidemann, (carl.tidemann@arena.gov.au) if you would like to discuss any aspect of ARENA's submission.

Yours sincerely

Darren Miller
 Chief Executive Officer, ARENA