



Australian Government  
Australian Renewable  
Energy Agency

**ARENA**

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## **ARENA submission on the Primary Frequency Response (PFR) Incentives Rule Change Draft determination**

ARENA welcomes the proposal for the introduction of financial incentives for the provision of primary frequency response (PFR) and has appreciated the opportunity to contribute to this outcome through the technical working group process and our funding of the double-sided causer pays study<sup>1</sup>.

One matter that we see as significantly unresolved in the draft determination is how PFR arrangements are expected to work in the context of ultra-high instantaneous shares of distributed energy resources (DER). As outlined in our recent submission on the *Governance of Technical Standards* and our response to the *PFR Requirements Rule Change Consultation Paper*, DER is currently being adopted at a rate of >3GW per annum, with electric vehicles and other sources of flexible demand forecast to be deployed at a greatly increased rate in the coming years. The acceleration of DER deployment has exposed a tendency in system planning and policy reform to underestimate the potential contribution, and disruptive effect, of customer engagement in the energy system, particularly when they are supported by jurisdictional environmental policies.

It now appears likely that, subject to security constraints, demand in the NEM could be entirely met by behind-the-meter generation by 2030. It is implicit in the draft determination that the requirement for PFR will need to be achieved through broadscale curtailment of DER such as is being canvassed to ensure minimum system strength and inertia levels are maintained.

ARENA encourages the AEMC to be explicit in its Final Determination with regard to:

- How PFR is expected to be achieved as we transition to higher instantaneous shares of DER including whether the expected extent of DER curtailment may be additional to that

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<sup>1</sup> <https://arena.gov.au/projects/australian-energy-council-double-sided-causer-pays-study/>

expected to be required to achieve minimum levels of inertia and system strength, and over what timeframes,

- Whether there is a pathway envisaged for future DER participation in mandatory PFR (e.g. through new connection standards) or the proposed PFR incentives regime, including in relation to the AEMC's broader two-sided markets work program, and
- Whether the AEMC observes any technology or information gaps that could be addressed through industry trials, that could support greater demand-side participation in the provision of PFR.

## 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 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.

ARENA welcomes the opportunity to support this rule change process by sharing information and insights from our DER project portfolio and is open to considering further collaborative studies and trials where they align with ARENA's investment priorities.

Please contact Jon Sibley, Principal Policy Advisor ([jon.sibley@arena.gov.au](mailto:jon.sibley@arena.gov.au)) if you would like to discuss any aspect of ARENA's submission.

Yours sincerely

Darren Miller

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