ARENA Funding Announcement A
Demonstration projects improving network hosting capacity of DER

ARENA is seeking expressions of interest (EOI) for projects that demonstrate how distribution networks, or the power system as a whole, can improve their ability to accommodate increased levels of distributed energy resources (DER).

The amount of DER that can be connected to a distribution network while the network remains within its technical limits[1] is called its 'hosting capacity'. Understanding how to manage high shares of DER (especially rooftop solar photovoltaics) is vital to ensure Australian consumers and energy market participants can capture the rewards of ever-cheaper solar energy. EOIs are due **5pm AEST Monday 7 May 2018.**

ARENA will assess applications for funding under its Advancing Renewables Program (ARP). This Funding Announcement should be read in conjunction with the ARP Guidelines. ARENA invites organisations with projects that fit within the scope described below to lodge an EOI through the ARENANet Grants Management System under the ARP Distributed Energy Funding Initiative.

Key Information

Activity Scope	Develop or demonstrate a novel technology, commercial model or demonstration project that: 1. allows distribution networks to host DER at higher levels of penetration; 2. allows market operators to manage the power system with a high share of DER while maintaining reliability and system security; 3. increases the visibility, predictability or control of DER for the Australian Energy Market Operator (AEMO), network service providers (NSPs) or other relevant entities to optimise power system operation within secure technical limits; or 4. increases the visibility, predictability or control of network characteristics and behavior to improve the efficiency of distribution network connection processes for DER or to optimise investment. This funding announcement is targeted at novel approaches that increase hosting capacity by managing power flow and voltage fluctuations from distributed renewable resources in real time, or allow the power system to operate within secure technical limits with minimal constraints on DER systems exporting energy to the grid.
Timeframes	● EOI submissions open: 15 March 2018

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[1] Technical limits could be dynamic or change over time. For example, increased visibility of network characteristics and behaviour could allow operation of a network closer to technical limits.

	● EOI submission close: 7 May 2018 5pm AEST ARENA will notify applicants with successful EOIs by 11 June 2018.
EOI assessment process	● EOIs will be assessed against the Merit Criteria as specified under the ARP Guidelines (note: each Merit Criteria will be weighted equally) ● Only those EOIs that are assessed as being of overall high merit against the ARP Merit Criteria will be invited to submit a Full Application
Funding Agreement	ARENA proposes to use the template Funding Agreement which will be published at the commencement of the EOI stage on the ARENA website https://arena.gov.au/assets/2017/10/September-2017-ARP-Template-Funding-Agreement.docx
'Out of scope' or ineligible projects	As the Advancing Renewables Program is always open for submissions, high merit EOIs deemed ineligible or 'out of scope' under this announcement may be directed to submit under normal ARP conditions. Contact proposals@arena.gov.au for more information on this option. Applications that are not of high merit will not be assessed further under any program by ARENA.

How you can demonstrate merit in ARENA's grant application process

The table below provides examples to show how you can demonstrate your network hosting capacity projects meet the ARP merit criteria. This guidance should be read alongside the ARENANet application form and ARP Guidelines.

ARP merit criterion	How the criterion applies to this funding announcement
A – Contributes to the Program Outcomes (clauses 1.5, 3.3 and 3.4 of the ARP Program Guidelines)	This criterion assesses how well the proposed project (or Activity) contributes to the ARP Program Outcomes, taking into account the investment priorities in the ARENA Investment Plan and any relevant funding announcement documentation *(such as this document)*. You can demonstrate merit against this criterion by describing one or more of the following: (a) how your Activity is a novel or innovative technology, technology application, commercial solution or first-of-a-kind in the Australian market; (b) the potential of your Activity to allow for higher network hosting capacity by reducing the costs associated with connecting DER to distribution networks, managing DER on distribution networks, or maintaining secure operation of the power system with high shares of DER; (c) the potential of your proposed approach to increase the visibility of DER to AEMO or other relevant entities; and/or (d) a credible path to commercialisation or adoption of your proposed approach. Evidence of credibility could include interest from or involvement of one or more network companies.
B - Applicant capability and capacity (clauses 3.5 and 3.6 of the ARP Program Guidelines)	This criterion assesses your capability and capacity, as well as that of any Activity partners to, deliver the Activity. You should refer to the ARP Guidelines for further information. Applications which include collaboration with an NSP may be considered higher merit.
C – Activity design, methodology, risk and compliance (clauses 3 .7 and 3.8 of the ARP Program Guidelines)	This criterion assesses the Activity design and implementation approach, as well as risk and compliance matters. Applicants are requested to specifically address cybersecurity risks and the risk of network service performance disruptions in the Activity risks. You should refer to the ARP Guidelines for further information.
D – Financial	This criterion assesses your financial capacity to deliver the Activity and

viability and co-funding commitment (clauses 3.9 and 3.10 of the ARP Program Guidelines)	whether the amount of ARENA funding sought and the total cost of the Activity are appropriate. You should refer to the ARP Guidelines for further information. If you have received funding from any other government or regulatory sources (including under the Demand Management Incentive Scheme or Demand Management Innovation Allowance), you should demonstrate the need for additional funding from ARENA.
E – Knowledge sharing (clauses 3.11 and 3.12 of the ARP Program Guidelines)	This criterion assesses the knowledge generated by the Activity in contributing to the ARP Outcomes. You can demonstrate merit against this criterion by describing: (a) the value of the knowledge expected to be generated by the Activity and its contribution to industry understanding of approaches to increase hosting capacity; (b) how well that knowledge is targeted to specific audiences; and (c) the extent to which knowledge or data obtained through the Activity will be shared publicly (for example through the AREMI platform or renewables integration stocktake database)