Media Release

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NOJA Power's intelligent network control device to capture real-time data on energy networks

The Australian Renewable Energy Agency (ARENA) has announced \$5 million in funding for Brisbane-based energy tech company NOJA Power to develop breakthrough technology to solve the challenges of ensuring the electricity grid is stable as renewable energy is integrated.

With ARENA funding, NOJA Power are developing smart switchgear that will monitor energy flow including voltage, current and phase angles on distribution networks. The switchgear including phasor monitoring units is capable of capturing granular real-time data up to a hundred times more frequent than current SCADA monitoring is capable of.

Once developed, 100 units will be then be installed on electricity networks across Queensland and Victoria where renewable energy connect to the grid and in locations of high renewable penetration.

The data captured by these devices will be shared with ARENA, the Australian Energy Market Operator (AEMO), Deakin University and the University of Queensland as well as AusNet and Energy Queensland to help provide more accurate real-time information on the electricity system, in a unique collaboration.

NOJA Power Group Managing Director Neil O'Sullivan said working closely with leaders in the renewable energy sector would help to achieve results.

"This is a great example of government, industry and universities working together and collaborating to develop real solutions to tomorrow's technical challenges on the distribution network," said Mr O'Sullivan.

ARENA Chief Executive Ivor Frischknecht said this new smarter generation of switchgear would enable better integration of renewable energy and improve grid stability.

"This new Australian-led technology will not only create a new innovation we can export to the world but will also benefit our whole electricity system by giving us greater visibility

over our distribution networks and allow for more variable renewable energy."

Key outcomes of the project include:

- Reduction in the cost of connection and increasing the value delivered by renewable energy in Australia
- Developing new protection, control and monitoring firmware to address renewable energy challenges
- Reducing or removing barriers to renewable energy uptake
- Increasing Australian skills in renewable energy
- Improving power system security, reliability and stability in Australia

About NOJA

NOJA Power have a long history of collaboration with Australian utilities, universities and Government Agencies. Throughout the company's history, NOJA Power has worked with multiple organisations to develop new technology and solve industry challenges, including bushfire mitigation strategies developed in response to the Black Friday bushfires in Victoria. NOJA Power designs and manufactures switchgear from their factory in Brisbane. Their products are designed for a variety of outdoor environments, designed for reliability across harsh climate zones. Through their collaborative efforts, they have developed control and protection algorithms to solve unique industry challenges in the past. The Australian firm NOJA Power are an industry leader in their area of Medium Voltage Switchgear. With their equipment in service in 86 countries and a strong record of R&D development, NOJA Power are capable of the engineering tasks required to address the new technology.

About ARENA

On behalf of the Australian Government, ARENA is working to accelerate Australia's shift to affordable and reliable renewable energy. We collaborate with industry and innovators to make renewable energy affordable and reliable for all Australians. Our role is to support the development of local renewable energy technology by helping bring the best ideas to life. We provide funding to researchers, developers and businesses that have demonstrated a pathway to commercialisation for their technologies and projects. Our funding helps find good renewable energy ideas and gets them to market. We build and support networks, and share the knowledge, insights and data from our funded projects to help people and organisations learn from one-another. Our success can be measured by a better energy system, cost effective technologies and an invigorated economy powered by a reliable supply of renewable energy. For more information, visit www.arena.gov.au.