



UNSW
SYDNEY



Operation and Protection of DC Microgrids

The use of DC microgrids is a potential growth area with a range of platforms including vehicles, aerospace, marine and rail. There is a need for developing tools, techniques and models to back up serious experimental work on hardware prototypes, and is working on protection devices and systems.

Competitive advantage

- Prototype High efficiency DC-DC hardware and converter technology to enhance microgrid performance.

Impact

- The techniques and technologies enhance the efficiency, performance and protection of DC microgrids.

Successful outcomes

- Tyree microgrid project
- Marine platforms
- Road-side signage
- Water treatment plants

Capabilities and facilities

- Access to state-of-the-art experimental facilities including:
 - 10kVA experimental DC microgrid with diverse set of loads and generators
 - 18-rack RTDS capable of modelling microgrid hardware
 - OPAL-RT real-time simulator

Our partners

- Hi-Vis Group
- A. W. Tyree Foundation
- ARENA

More Information

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