



Battery Energy Storage

CONTINUING PROFESSIONAL DEVELOPMENT COURSE:

17-18 OCTOBER 2023 | ONLINE DELIVERY

A two-day professional development course in battery energy storage applications presented by the Australian Power Quality and Reliability Centre

COURSE OBJECTIVES

Energy storage is often seen as a solution to many of the difficulties encountered due to the intermittent nature of renewable energy resources such as solar PV and wind energy. However, energy storage is a rapidly developing technology. There remain many obstacles to increasing penetration of energy storage and in many cases, the capability of energy storage systems is not well understood.

This course will focus on battery energy storage applications. The topics covered in the course will include the following:

- A description of the primary battery energy storage technologies, how they work and their advantages and disadvantages.
- Technical, Economic and Regulatory Drivers For Large-Scale Energy Storage Systems
- The role of battery management systems
- The ability of battery energy storage to provide grid support functionality as well as the issues pertaining to integration of energy storage into electricity networks
- Standards and codes for energy storage systems including for grid integration
- The impacts of integration of energy storage on electricity network quality of supply



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COURSE BENEFITS

By attending the course, you will gain knowledge and skills to assist you to:

- Appreciate the different battery energy storage technologies and their relative advantages and disadvantages
- Have a systematic understanding of the capabilities of battery energy storage systems and how they should be designed
- Understand battery management systems and their importance
- Gain knowledge of guidelines and standards for integration of energy storage systems into electricity grids
- Gain a practical understanding of how energy storage systems may impact power quality (for better or worse)

WHO SHOULD ATTEND?

Any individual who is interested or requires better understanding of the capabilities of battery energy storage systems, their advantages and disadvantages and how they can best be integrated into the electricity networks of the future.

TRAINING INVESTMENT

The course investment provides for an inclusive industry related training package including course notes. The course fee is **AUD\$1770 including GST** per person.

Participants may count course hours towards their continuing professional development requirements.

NOTE: Arrangements for accommodation are the responsibility of participants and costs are not included in the course fee.

ABOUT THE SPEAKERS



Dr Jon Knott is a Research Fellow with the Australian Power Quality and Reliability Centre. Before joining the APQRC in 2020, he was Project Manager and Research Fellow on the \$10.5M ARENA-funded Smart Sodium Storage System (S4) Project – a project aimed at developing and demonstrating sodium-ion batteries in renewable energy storage applications. His work at the APQRC focuses on integration of energy storage into renewable energy systems, energy management systems, and distributed infrastructure resilience.



Mr. Sean Elphick is the Research Coordinator with the Australian Power Quality & Reliability Centre. He has almost 20 years' experience in the areas of power quality monitoring and data analysis. Sean is a member of EL-042-03, the Standards Australia subcommittee responsible for development of the Australian Standard for grid-tie inverters, AS 4777.



Associate Professor Duane Robinson has recently been appointed as Technical Director of the Australian Power Quality and Reliability Centre. Associate Professor Robinson is also the Deputy Director Sustainable Buildings Research Centre and Associate Professor at the University of Wollongong. His research interests include modelling, analysis and control of power distribution systems, energy efficiency in networks and at point of utilisation, sustainable building practices, microgrids and distributed generation, power quality and mitigation techniques.



Mr Ty Christopher is the Managing Director of Ty Christopher and Associates, and an Honorary Professorial Fellow at the University of Wollongong. Ty has extensive experience working in the Electricity Supply Industry in New South Wales. His career within the industry has included responsibility for substation and mains design, project management, system operations, network planning, asset strategy and most recently program delivery

REGISTRATION

To register please click on the link below:

[Battery Energy Storage Course](#)

Note: There is no guarantee that economic participation levels for this course can be achieved. Registrants will be notified 2 weeks prior to course if the course cannot proceed due to insufficient numbers. The program may be changed at any time due to unforeseen circumstances. If the course cannot proceed for any reason, UOW will not accept liability of whatsoever kind for expenses incurred by any person or corporation with the sole exception of the course investment, which will be refunded in full.

ENQUIRES

Registration enquiries:

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