Power Quality with a focus on Renewable Energy

CONTINUING PROFESSIONAL DEVELOPMENT COURSE:
POWER QUALITY WITH A FOCUS ON RENEWABLE ENERGY

14–15 AUGUST 2019
MELBOURNE CONVENTION AND EXHIBITION CENTRE, MELBOURNE

A two-day professional development course in power engineering presented by the Australian Power Quality and Reliability Centre from the University of Wollongong, in conjunction with the POWER + UTILITIES Conference and Expo.

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COURSE OBJECTIVES

The rapidly increasing volume of renewable energy generation (both large and small scale) has resulted in a renewed emphasis on power quality. Combined with the application of power electronic equipment such as variable speed drives management of PQ remains an important challenge in order to ensure that electronic equipment such as digital controls, computers and sensitive process control equipment operates as intended. This course will focus on power quality in renewable energy generation rich environments and course will give a practical understanding of the principles, practices and problems associated with grid connection of these resources. Further areas covered in the course include the operation, control and protection of distribution networks, network planning and reliability aspects for facilitating integration of these new generating sources.

COURSE BENEFITS

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

- Gain a systematic understanding of the various power quality disturbances, including their causes and the types of loads affected.
- Familiarise yourself with the standards for particular types of disturbances and mitigation strategies if standard limits are exceeded.
- Distinguish the different types of available power quality monitoring equipment and their particular applications.
- Determine how utilities and customers can improve their power quality.
- Appreciate different renewable and distributed generation resources, their operation, and functional aspects;
- Gain a systematic understanding of the impact of different renewable and distributed generation resources on electricity network operation, control and protection
- Gain knowledge of guidelines and standards for integration of renewable energy resources into electricity grids
- Be aware of the design of interfaces for different types of renewable energy resources and their particular applications for network benefits
- Gain a practical understanding of various power quality problems associated with renewable and distributed generation integration
- 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

WHO SHOULD ATTEND

Managers, utility specialists and technical staff who wish to advise customers on renewable energy integration, or who provide services to large clients, or those who wish to understand aspects of network design, construction and maintenance techniques for maximising renewable energy penetration.

Graduates, end-users or personnel working in all areas of power system design want to understand how the system interacts with distributed generation, will also benefit from attending this course.

TRAINING INVESTMENT

The course investment provides for an inclusive industry related training package with course notes, lunches and morning and afternoon tea. Course fee per person is AUD$1700 including GST. 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. A list of hotels and motels in the Melbourne area will be supplied to participants upon registration.

REGISTRATION

To register please click on the link: https://uow.onestopsecure.com/OneStopWeb/PQFocusRenewableEnergyEvent

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

Please call Ms Raina Lewis at the
Australian Power Quality and Reliability Centre, University of Wollongong
Phone: (02) 4221 3335 Email: raina_lewis@uow.edu.au

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