

Joint Australian/German, Industry/University Workshop on "Power Quality Aspects of Modern Distribution Networks"

Endeavour Energy Power Quality and Reliability Centre University of Wollongong

Increasing deployment of distributed generation technologies and the large-scale use of new device technologies require management of existing and future transmission and distribution networks. Moreover, the existing power quality standards and guidelines require further refinement and development in areas where there are difficulties in application or where clarity is required. This one day workshop gathers University – Industry expertise from both Australia and Germany aiming to cover some of the above aspects.

Venue: University of Wollongong, Room TBA

Date: 4th August 2011

Note: Prior registration before 3rd August 2011 is necessary. **The number of seats will be limited.** Morning/afternoon tea/coffee and light lunch provided. There is no charge for this event.

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Agenda:

9.00 am.	Registration	
9.10 am	Welcome Philip Ogunbona, Dean of the Faculty of Informatics, University of Wollongong Sarath Perera, Technical Director, Endeavour Energy Power Quality and Reliability Centre, University of Wollongong	10 minutes
9.20 am -9.45 am	Power Quality Challenges of the Future Distribution networks Vic Gosbell, University of Wollongong	25 minutes
9.45 am -10.45 am	Session 1: Power Quality Standards, Codes, Regulation Australian context, Alex Baitch, BES(Aust) Pty Ltd European context, Jan Meyer, Universitaet Dresden (Germany) Germany Discussion	25 minutes 25 minutes 10 minutes
10.45 am -11.15 am	Tea/Coffee break	30 minutes

11.15 am - 12.30 pm	<p>Session 2: Power Quality Measurements and Challenges ahead</p> <p>Design aspects of measurement campaigns, Jan Meyer, Universitaet Dresden (Germany) Germany</p> <p>Example campaigns of Germany, Jan Meyer, Universitaet Dresden (Germany) Germany</p> <p>Example campaigns of Australia, Sean Elphick, University of Wollongong</p> <p>Discussion</p>	<p>15 minutes</p> <p>20 minutes</p> <p>25 minutes</p> <p>15 minutes</p>
12.30 pm-1.30pm	Lunch	60 minutes
1.30pm- 2.45 pm	<p>Session 3: Specific Aspects of Power Quality</p> <p>Summation aspects of low order harmonics in public LV distribution networks, Jan Meyer, Universitaet Dresden (Germany) Germany</p> <p>Accuracy of instrument transformers for harmonic measurements, Jan Meyer, Universitaet Dresden (Germany) Germany</p> <p>Voltage sag contours, Robert Barr, Electric Power Consulting</p> <p>Discussion</p>	<p>25 minutes</p> <p>20 minutes</p> <p>20 minutes</p> <p>10 minutes</p>
2.45 pm-3.15 pm	Tea/Coffee break	30 minutes
3.15 pm – 4.30 pm	<p>Session 4: Power Quality Standards - New Developments</p> <p>Harmonic allocation - Voltage droop method, Robert Barr, Electric Power Consulting and Vic Gosbell, University of Wollongong</p> <p>Harmonic allocation - New method for HV-distribution networks, Jan Meyer, Germany</p> <p>Voltage Unbalance emission assessment in radial power systems, Sarath Perera, University of Wollongong</p> <p>Discussion</p>	<p>20 minutes</p> <p>20 minutes</p> <p>20 minutes</p> <p>15 minutes</p>
4.30 pm	Closing	

The Speakers



Dr Jan Meyer is a senior research assistant in the field of Power Quality at the Institute of Electrical Power Systems and High Voltage Engineering, Technische Universität Dresden (Germany). His main interests are all aspects of design, management and analysis of large power quality monitoring campaigns, especially the application of statistical methods for data analysis. Furthermore different aspects of harmonics in the low and high frequency range (summation, propagation, equipment immunity) are covered by his work.

Jan Meyer is a member of several national and international working groups dealing with network disturbances and EMC, e.g. the German-Austrian-Swiss-Czech working group DACHCZ EMV/PQ, which maintains the "Technical Rules for Assessment of Network Disturbances", the CIRED session advisory group of Session 2 (Power Quality and EMC) and CIGRE working group C4.112 (Guidelines for Power Quality Monitoring).



Emeritus Professor Vic Gosbell is Technical Advisor to the Endeavour Energy Power Quality and Reliability Centre and has been actively engaged in teaching, research and consulting in various aspects of power quality for over twenty years.



Professor Alex Baitch is principal of BES (Aust) Pty Ltd and has extensive experience in power system engineering and quality of electrical supply.



Associate Professor Sarath Perera is Technical Director of the Endeavour Energy Power Quality and Reliability Centre and an Associate Professor in the School of Electrical, Computer and Telecommunications Engineering. His research interests include power quality, distribution system reliability, EMC and power system simulation techniques.



Professor Rober Barr is principal of Electric Power Consulting Pty Ltd and has dealt with a wide range of power quality and general electricity industry problems.



Mr Sean Elphick is a Professional Officer with the School of Electrical, Computer and Telecommunications Engineering. He is active in the areas of power quality monitoring and data analysis.