Power & Energy workshop

22-23 March 2011, Noordwijk, The Netherlands

Renewable energy generation and the need to upgrade grid infrastructure are bringing unprecedented challenges to the electricity industry. Measurement of efficiency, power loss and power quality will play a significant role in meeting these challenges as network operators and manufacturers of electrical equipment need to determine the behaviour of their systems as configurations and conditions change.

The "next generation of power and energy measurements" is a joint research project of National Measurement Institutes throughout the EU. The project was devised to migrate the highest-level techniques in ac electrical measurements from the laboratory to practical on-site measurements of power and power quality for utilities and manufacturers.

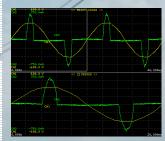
The project has resulted in an array of new measurement equipment, algorithms and software to provide the infrastructure to enable the measurement of complex electrical parameters in practical conditions.

This workshop is a showcase for the project outputs and is an opportunity to discuss the future applications of this work to on-site power and energy measurements.

Venue:

NH Conf. Centre Leeuwenhorst Noordwijk, The Netherlands Admission: € 150,- (incl.Dinner) For registration and more information please visit: http://projects.npl.co.uk/power energy









European Metrology Research Programme





























Agenda

DAY 1 22-03-2011			
12:00	Registration		
13:00	Welcome.		
13:05	Aims of the project	Paul Wright	
13:25	Session 1 – Precision digitizers for power and energy measurements	Guilherme Ihlenfeld	
13:35	A precision digitizer for laboratory measurements	Guilherme Ihlenfeld	
13:55	A digitizer for on-site power and energy measurements	Paul Wright	
14:15	Session 2 – Precision transducers for power and energy measurements	Hans Arne Frøystein	
14:25	Voltage dividers and low-value shunts for power and energy measurements.	Kåre Lind	
14:45	Coffee		
15:15	Development of measuring systems for precision transducer characterization	Valter Tarraso	
15:35	The development and performance of high current shunts for power measurements.	Matin Garcocz	
15:55	Session 3 – Algorithms for Power and Energy Measurements	Paul Clarkson	
16:05	Methods and comparisons of asynchronous Sampling applied to ac measurements	Rado Lapuh	
16:25	Application of adaptive noise cancelling filters in ac electrical measurements	Paul Wright	
16:45	Free Time / Social time		

DAY 2 23-03-2011			
8:30	Poster Session Poster Session		
9:30	Session 4 – Non-Invasive Transducers for High Voltage and High Current	Gabriella Crotti	
9:40	High current ac metrology u <mark>sing Rogowski coils</mark>	Jari Hallstrom	
10:00	Measurement of high impulse currents by Rogowski and Pearson coils	Daniela Istrate	
10:20	Coffee		
10:50	Session 5 – Implementation and Measurements	Paul Wright	
11:00	The effect of main impedance on harmonics and flicker measurements	Ionel Urdea Marcus	
11:20	On-site measurements of Power and Power Quality	Paul Wright	
11:40	Future Work and Discussion	Paul Wright	
12:00	Closing		

20:00

Dinner