

# ABB 2010 technology roadshow

## SESSION OVERVIEW – SEMINAR ROOM 1

8.30 am – 9.00 am

TEA AND COFFEE ON ARRIVAL

**9.00am – 9.15am Introduction to ABB** – ABB is a leader in power and automation technologies that enable utility and industry customers to improve performance while lowering environmental impact.

**9.15am – 10.00am Efficient use of softstarters in motor applications** – Softstarters, long considered just voltage reduction starters, can now provide precise voltage and current control which is suitable for pumping applications, water hammer issues as well as jammed pumps. Torque control is essential to overcoming water hammer and now even 2-phase control softstarters are available with torque control.

**10.00am – 10.45am Advancements in motor protection and control** – ABB presents the new range of AF contactors, beginning at 9 amp AC3, with electronic coil technology aimed at providing greater safety, reliability and availability of your motors. The intelligent UMC100-FBP motor protection and control relay contains motor protection functions but also provides diagnostic data to enable unplanned outages to be avoided and integration into high level control systems.

10.45am – 11.15am

MORNING TEA

**11.15am – 12.00pm Arc flash hazard minimisation involving the circuit breaker** – Arc flash hazard analysis defines the procedures which limit the severity of electrical arcs on personnel. By measuring the released energy we define the risk area and specify the level of personnel protective equipment (PPE). The presentation explores the role of the circuit breaker in this analysis. Secondary protection, with arc guard system to detect an arc and trip the incoming circuit breaker, is also covered.

**12.00pm – 12.45pm Electrical protection in solar applications** – The increasing demand for alternative energy has seen the solar market grow rapidly. Solar installations have specific requirements for energy distribution and protection, far beyond merely switching a DC voltage. A number of these requirements will be discussed.

12.45pm – 1.30pm

LUNCH

**1.30pm – 2.15pm Innovative inverter technology provides benefits to the solar industry** – The PVS800 allows a reliable, economic and compact solution for connecting PV arrays to the grid. Available in 100, 250 and 500kW power ratings the new inverter can be used in both industrial scale plants and medium sized plants installed on the roofs of commercial or industrial buildings.

**2.15pm – 3.00pm Measurement and communication with modern day circuit breakers** – Present day power distribution networks are required to provide more than just protection. The presentation explores the communication and measurement features of circuit breakers, enabling them to form part of a high level control protocol.

**3.00pm – 3.45pm Enhance safety in distribution boards** – Final distribution loads are increasing and various regulation, workplace procedures and standards have meant the traditional distribution board may face challenges of compliance. This presentation provides an alternate view of the well known distribution board and explores some of the features now available.

3.45pm – 4.15pm

AFTERNOON TEA

**4.15pm – 5.00pm Reliability, availability, maintainability and safety: (RAMS) of LV switchgear** – RAMS is a very important issue with plant managers, operations, maintenance and safety officers, EPC's and consultants due to the greater emphasis on OH&S today than 10 years ago. In addition there have been great advancements in electronics and intelligent switchgear over the last 20 years.

**5.00pm – 5.45pm Open building control systems** – Discover the many advantages of the world's only open standard for building and home controls. KNX offers total building integration from lighting to blinds, HVAC and energy management.

## SESSION OVERVIEW – SEMINAR ROOM 2

8.30 am – 9.00 am

TEA AND COFFEE ON ARRIVAL

**9.00am – 9.15am Introduction to ABB** – ABB is a leader in power and automation technologies that enable utility and industry customers to improve performance while lowering environmental impact.

**9.15am – 10.00am The first Transformer less 6.6kV, VSI MV drive, technology of the future** – The ACS 2000 is packed with innovative technology to meet industries challenges, such as lower harmonics, reduce energy consumption, static VAR compensation, easy installation, commissioning and with it's withdrawable phase modules, allows easy front access to all drive components providing quick replacement.

**10.00am – 10.45am Save Energy, Enhance safety, Boost process time** – ABB's latest drive technology has many new hardware and software features. This presentation will elaborate on how these features will assist in saving and monitoring energy, implementing safety functionality and improving productivity. We will also discuss the IPC (integrated pump control) software for the water and wastewater industry.

10.45am – 11.15am

MORNING TEA

**11.15am – 12.00pm Improve power quality with variable speed drives** – With the ever-increasing use of non-linear loads, harmonic loads and its effects on the power distribution system have become an important factor in today's business. This topic will examine different alternatives to meet harmonic standards when installing variable speed drives.

**12.00pm – 12.45pm Maximise capital investments with a drives lifecycle management program** – We introduce our lifecycle management program for ABB drives to maximise the availability and reliability of equipment. This program provides the highest return on equipment through improved reliability, optimised performance, minimised repair costs and an extended operating life.

12.45pm – 1.30pm

LUNCH

**1.30pm – 2.15pm Advances in low voltage motors provide increased reliability and adaptability** – Our LV motors ranges from small industrial performance aluminium motors to highly adaptable process performance cast iron motors. This presentation will discuss motor reliability and how ABB meets the application needs of our customers and reduces energy efficiency costs using MEP standard motors.

**2.15pm – 3.00pm Optimise MV/HV motor efficiencies and simplify certification to Ex standards** – ABB HV motor factories are developing new products with better suitability for Australian industry segments. The wider portfolio will provide customers previously reluctant to purchase "high specification" motors to enjoy the benefits of leading-edge motor technologies, energy efficient motors and widely accepted Ex certification schemes.

**3.00pm – 3.45pm Motor and machine lifecycle services** – On-site service, off-site maintenance and repair and spare part procurement. Machine risk assessment, on and off-line testing from electrical signature analysis to vibration analysis. ABB's machine service is the answer.

3.45pm – 4.15pm

AFTERNOON TEA

**4.15pm – 5.00pm To meet the international manufacturing challenge, consider the new paradigm - people, task, process and robots** – Learn 10 key advantages from a business owners perspective of including free-standing robots in a modern manufacturing solution - be there to see the potential of boosting Australian-based manufacturing - the challenges and the extraordinary benefits to business owners in Australia.

**5.00pm – 5.45pm Change for more: market expertise, industrial productivity, energy efficiency** – ABB offers a comprehensive range of scalable PLC's and robust HMI control panels as well as high availability solutions. Areas of core focus for ABB PLC's and HMI include water and waste water, energy generation, food and beverage, building automation and OEMs.

**SOLUTIONS LEGEND:**

<span style="color: blue;">■</span> MOTOR PROTECTION AND CONTROL	<span style="color: green;">■</span> ELECTRICAL SAFETY	<span style="color: teal;">■</span> SOLAR APPLICATIONS	<span style="color: yellow;">■</span> DISTRIBUTION AND PROTECTION
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<span style="color: orange;">■</span> AUTOMATION AND ROBOTICS	<span style="color: lightgreen;">■</span> VARIABLE SPEED DRIVES	<span style="color: magenta;">■</span> EQUIPMENT LIFECYCLE MANAGEMENT SERVICES	<span style="color: blue;">■</span> MOTORS AND MACHINES
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