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Industry-specific Workshop Sessions



Industry-specific Workshop Sessions

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Code Descriptions:

C = Customer Case Study
 P = Panel Discussion
 T = Technical Training
 W = Workshop

“1-5” at the end of a session code indicates the length of the session. “1” being a one-hour session, “2” being a two-hour session, etc.

“A, B or C” at the end of a session code indicates the session is given more than one time. “A” represents the first time the session is being offered, “B” the second time, and “C” the third time. If an A, B or C does not follow a session code, the session is given only once.

Chemical Industry System Specialist

TUESDAY, MARCH 24, 2009

Session 1: 9:30 a.m. – 10:30 a.m.

TCS-23-1A System 800xA introduction

This training session will introduce the System 800xA Extended Automation System and the benefits it delivers. This overview presentation will exhibit how System 800xA extends functionality beyond that of other control systems through unparalleled connectivity, integrated applications and its many industrial IT enabled partners. This presentation sets the stage for many subsequent sessions and shouldn't be missed.

Session 2: 11:00 a.m. – 12:00 p.m.

WLS-01-1 Batch and continuous State Based Equipment Control: Engineering using PC Equipment Library

Could your plant benefit from an overall production improvement? State Based Control is a plant automation control design based on the principle that all process facilities operate in recognized, definable process states representing a variety of normal and abnormal conditions of the process. State Based Control implemented with the latest developments in object-based technologies, delivers direct benefits to its adopters in a variety of operational excellence categories. This results in productivity increases, higher asset utilization of both people and process, automated responses and recovery for abnormal conditions and provides an environment for knowledge capture directly into the control design.

Session 3: 1:30 p.m. – 2:30 p.m.

WCS-36-1 Using energy management to drive profitability and sustainability

The continued rise in energy costs has significantly impacted the profit margins of manufacturers. While the introduction of alternative fuels may lessen this impact, it adds new complexities to the overall management of energy throughout a single facility, especially from the corporate perspective. This workshop will examine this problem and showcase a solution that increases profitability in a sustainable fashion.

Session 4: 3:00 p.m. – 4:00 p.m.

WCH-01-1 Best practice for low risk chemical project execution

This session provides an understanding of ABB's engineering methodologies when designing projects for the chemical industry. It is focused on optimizing engineering, while minimizing risk. The benefits of using object-oriented programming techniques function diagrams, pre-configured and pre-tested libraries and bulk engineering methods will be highlighted. Participants will see the advantage in starting a project with ABB's chemical solution template that utilizes industry best practices and makes use of generic batch libraries.

Session 5: 4:30 p.m. – 5:30 p.m.

WCS-29-1 System 800xA engineering with Function Designer and bulk tools

This technical workshop will provide to attendees a demonstration of ABB's System 800xA's Function Designer. Function Designer is a graphical tool which is used to create control logic via easy to read diagrams. You will also learn how System 800xA's bulk configuration tools can be used to rapidly create a project configuration using these logic diagrams.

WEDNESDAY, MARCH 25, 2009

Session 6: 8:00 a.m. – 9:00 a.m.

WGC-03-1 Industrial energy management: Developing an effective energy strategy

Effective operators take a strategic approach to energy efficiency. This presentation stresses the importance of moving energy from the plant room to the board room. Attendees will be able to identify the value drivers that make energy management a strategic issue. They will also develop the components of a successful energy strategy.

Session 7: 9:30 a.m. – 10:30 a.m.

WCS-33-1 Connecting automation to ERP systems such as SAP

One of the common questions that we hear is, "Can you connect to SAP?" This session will focus on ABB's Industrial IT Enterprise Connectivity product, and show how ABB's System 800xA platform can be easily connected to enterprise systems or manufacturing systems, using various strategies such as Web Services, ODBC, or direct connections to SAP. This workshop will include a demonstration on how quickly and easily the connection to SAP can be established and show how the business information can be used inside of the 800xA or manufacturing environment.

Session 8: 11:00 a.m. – 12:00 p.m.

CCS-01-1 Hemlock Semiconductor Asset Management Pilot program with Consult IT

The Consult IT Asset Management Pilot is designed to help customers understand System 800xA's Asset Management capabilities by actually using one of their higher level units for a prototype effort. It is tailored to the customer's working environment and based on interviews with plant maintenance and operations personnel to provide a complete asset management experience. This workshop discusses how such a pilot program was delivered at Hemlock Semiconductor Corporation.

Session 9: 1:30 p.m. – 2:30 p.m.**TCS-22-1 System 800xA Batch Recipe Management**

This workshop will provide a brief overview of the all key features of 800xA Batch Management. After the overview, the workshop will present in depth the Recipe Management features of System 800xA. Specific focus will be given to development of reusable components, versioning, formulation parameter management and flexible operator interface functions. The workshop concludes with a brief demonstration of 800xA Batch Management.

Session 10: 3:00 p.m. – 4:00 p.m.**WCS-03-1 Combining process control and safety in System 800xA**

At this presentation, you will learn how System 800xA can help you reduce risk to people, the environment and business through its High Integrity Safety Instrumented System (SIS) technology. We will talk about industry requirements throughout the safety lifecycle, and how System 800xA can provide the most comprehensive platform for process safety management, including safety engineering systems, services, instrumentation, logic solvers and final control devices.

Session 11: 4:30 p.m. – 5:30 p.m.**TCS-16-1 MOD 300 Control Evolution and Control Library demo**

ABB has developed solutions for protecting your investments in control applications. This workshop covers the Advant/MOD 300 control evolution strategies, new product releases and development activities. There will be a demonstration of the Advant/MOD 300 CCF library executing in the AC 800M controller environment.

THURSDAY, MARCH 26, 2009**Session 12: 8:00 a.m. – 9:00 a.m.****CCS-06-1 Custom solutions with NOVA Chemicals**

Customers are often looking for creative software solutions to extend the functionality of System 800xA, integrate existing plant systems or facilitate evolution and migration strategies. Consult IT's Solutions Group offers these capabilities. This workshop describes the types of solutions already provided by this team, and specifically discusses how several custom solutions were used to assist NOVA Chemicals in reaching its goals.

Session 13: 9:30 a.m. – 10:30 a.m.**WCH-02-1 Best practice for chemical batch applications**

This session provides an understanding of ABB's engineering methodologies when designing Batch projects for the

chemical industry. It is focused on designing batch systems using ISA-88 principles. The benefits of using object-oriented programming techniques, pre-configured and pre-tested libraries, and bulk engineering methods will be highlighted. You will see the advantage in starting a project with use of generic batch libraries using state driver concepts for equipment module control.

Session 14: 11:00 a.m. – 12:00 p.m.**CCS-12-1 PC Device Library benefits during System 800xA engineering**

This workshop discusses the benefits of using the Process Control Device Library (PCDeviceLib) as an engineering standard within System 800xA. The PCDeviceLib includes control modules, faceplates and graphic display elements for a wide range of device objects commonly found in industries like oil and gas, chemicals, life sciences, pharmaceutical, and pulp and paper. During this workshop we will take a detailed look at how the PCDeviceLib can simplify your engineering efforts, reduce your configuration, testing and commissioning time, lower project costs and simplify the overall long term maintenance of your system.

Session 15: 1:30 p.m. – 2:30 p.m.**Session 16: 3:00 p.m. – 4:00 p.m.****WCS-07-1 Emerging technologies and the impact on automation systems**

New technologies are being released constantly. New ways of communicating and collaborating become more popular and widespread every day. New graduates have different experiences and expectations regarding technology and communications. When you think about cloud computing, RFID, social networking, next generation Microsoft software, nano-technology, wireless, and next generation fieldbuses and standards, you might wonder how all of these things can and should be applied to automation systems. Attend this workshop to hear thoughts and predictions from the automation technology experts.

Session 17: 4:30 p.m. – 5:30 p.m.**PCS-02-1 Ask the experts: Panel discussion of lifecycle and evolution**

This is an open forum discussion designed to answer any questions that attendees may have regarding the lifecycle management of ABB control systems. Discussion may include ABB's lifecycle programs, such as Automation Sentinel and OCS functionality, as well as implementation considerations. Experienced ABB personnel will be present to address participant comments and questions.

Discrete Manufacturing Solutions

TUESDAY, MARCH 24, 2009

Session 1: 9:30 a.m. – 10:30 a.m.

TRO-02-1A Robotics 101

Robotics 101 will provide a basic primer to the world of industrial robotics. The session will review the general configuration of industrial robots, the major components that comprise an industrial robot, a review of many typical applications and a review of the ABB robot portfolio.

Session 2: 11:00 a.m. – 12:00 p.m.

PCS-01-1 Manufacturing system security roundtable

The usage of commercial operating systems has dramatically lowered the cost of modern systems, but coupled with the ever increasing requirement of global access, has introduced new complexities. One of the largest issues facing manufacturers today is the security of their systems' infrastructure. This roundtable, with representation from both technology vendors and end users, will explore how this issue is affecting manufacturers today. It will provide some guidance on best practices in the area of system security.

Session 3: 1:30 p.m. – 2:30 p.m.

WCS-36-1 Using energy management to drive profitability and sustainability

The continued rise in energy costs has significantly impacted the profit margins of manufacturers. While the introduction of alternative fuels may lessen this impact, it adds new complexities to the overall management of energy throughout a single facility, especially from the corporate perspective. This workshop will examine this problem and showcase a solution that increases profitability in a sustainable fashion.

Session 4: 3:00 p.m. – 4:00 p.m.

WCS-08-1 Energy integration, collaboration between manufacturing and utilities

Coordination of the production needs for power and steam generation plays an essential role in several industries. High reliability requirements, large variations in energy consumption and changing market conditions are all critical factors. ABB's cpmPlus Expert Optimizer (EO) and cpmPlus Energy Management and Optimization (EMO) enable producers to manage this complexity. EMO monitors energy efficiency and costs, ensures power balance and generates load forecasting and planning (among other features), while EO increases power output, boiler efficiency and usage of most efficient boilers while reducing steam parameter variability (and more). Use both for true collaboration of production and utilities.

Session 5: 4:30 p.m. – 5:30 p.m.

WCS-18-1 Justifying projects from a financial perspective

A plant manager we interviewed said, "If you can't show me the results on a balance sheet, it didn't happen." This workshop will focus first on explaining how projects are financially justified; then on showing how improvements in manufacturing can impact the financial statement. It will explain those improvements in terms that can be readily understood by financially focused managers.

WEDNESDAY, MARCH 25, 2009

Session 6: 8:00 a.m. – 9:00 a.m.

Session 7: 9:30 a.m. – 10:30 a.m.

WRO-05-1 Introduction to PickMaster software for picking and packaging

PickMaster for picking simplifies the integration of vision guidance, conveyor tracking and robot motion on all ABB robotics including the IRB360 Flexpicker. PC based graphical configuration tools simplify the development and writing of vision-guided robot applications. Product features and programming basics will be discussed.

Session 8: 11:00 a.m. – 12:00 p.m.

WRO-04-1 Introduction to PickMaster software for palletizing

Robotic palletizing provides manufacturers a flexible solution for handling multiple products and package sizes simultaneously or multiple changeovers daily. PickMaster for palletizing provides the tool to simplify the programming of the palletizing system and easily add future package configurations as production changes occur. Product features and programming basics will be discussed.

Session 9: 1:30 p.m. – 2:30 p.m.

Session 10: 3:00 p.m. – 4:00 p.m.

CCS-05-1 Control system networks, integration and architecture on the corporate network

The eternally difficult question: Do I allow my plant controls network (DCS, PCS, SCADA, etc) to be connected to the Corporate network or not? By allowing the connection visibility is gained; plant information can be used to increase business operations and efficiency as well as lowering overall costs of support by allowing remote access into the network. At the same time, it also increases the potential for a security event to occur by 100%. Are the benefits enough to outweigh the risks? Can this new connectivity be implemented in a manner that allows enough protection to make the risk insignificant? While it may be hard to make the first step, a proper design and implementation of infrastructure and controls will allow for safe connectivity between plant control network and the business corporate network.

Session 11: 4:30 p.m. – 5:30 p.m.**PRO-01-1 Addressing labor shortages and manpower requirements: Top 10 reasons to invest in robotics**

With a cross-section of industry experts from various markets within the consumer industry segment, this session will cover their key reasons to use flexible robotic automation, and will also survey their future automation needs.

THURSDAY, MARCH 26, 2009**Session 12: 8:00 a.m. – 9:00 a.m.****WCS-15-1 How to choose KPIs relevant to your business objectives**

One of the main buzzwords used in business today is Key Performance Indicators (KPIs). These are being touted by consultants and industry analysts as the mechanism to drive organizational change and improve performance. While the value of KPIs and the visibility that they provide is unquestionable, the challenge comes from picking the ones that are most appropriate to the business. This workshop will explore ways to determine which KPIs should be focused on, and how to use them once they are in place.

Session 13: 9:30 a.m. – 10:30 a.m.**WCS-40-1 Understanding the Unified OPC Architecture**

The focus of this workshop is to provide an overview of the OPC Unified Architecture specification. The OPC Unified Architecture provides a foundation of base service developed as web services providing architecture for secure, reliable interoperability for the transportation of data/information across the automation and enterprise hemisphere. The OPC Unified Architecture brings together the existing OPC technology that has been developed over the last 10 years to an integrated platform based on web services.

Session 14: 11:00 a.m. – 12:00 p.m.**WRO-06-1 Robotics for alternative energy**

The race is on to implement alternative energy resources into an overall energy scheme. Robotics are playing an important part in bringing this fast-paced manufacturing sector on-line.

Session 15: 1:30 p.m. – 2:30 p.m.**TPO-29-1 Application of breakers and reclosers for reliable distribution operation**

This course will provide new engineers with an introduction to the use of breakers and reclosers in the power industry. Participants will learn what makes up a breaker, its functionality and constraints, and the roles of a recloser. Discussion will focus in particular on how and when this equipment is applied for reliable distribution operation today.

Session 16: 3:00 p.m. – 4:00 p.m.**Session 17: 4:30 p.m. – 5:30 p.m.****WRO-02-1 Human and robotic interaction: SafeMove**

Robot safety has progressed to unprecedented levels with ABB's SafeMove package. This advanced product offering allows features to allow safe human intervention with the robot and three dimensional programmable containment of robot motion, creating lean robotic cell configurations.

Industrial Steam Solutions

TUESDAY, MARCH 24, 2009

Session 1: 9:30 a.m. – 10:30 a.m.

TCS-23-1A System 800xA introduction

This training session will introduce the System 800xA Extended Automation System and the benefits it delivers. This overview presentation will exhibit how System 800xA extends functionality beyond that of other control systems through unparalleled connectivity, integrated applications and its many industrial IT enabled partners. This presentation sets the stage for many subsequent sessions and shouldn't be missed.

Session 2: 11:00 a.m. – 12:00 p.m.

WPG-01-1 DBDOC and your Harmony Symphony INFI 90 System

If you have Harmony (Symphony / INFI 90) at your plant, then attend this session to see how DBDOC strengthens your DCS system with a powerful search and navigation tool. Decrease time to troubleshoot problems, save money and maintain production. See why DBDOC, created by G. Michaels Consulting Ltd., is used around the world. If you already have DBDOC in your plant, see our new features that include trending internal values and minimizing the real-time data load, safe access from the Business LAN and new support for 800xA consoles. Integration with Smart-View will also be discussed.

Sessions 3 and 4: 1:30 p.m. – 4:00 p.m.

WCS-14-2 (NOTE: 2 hour session)

Getting the full value of ABB's Lifecycle programs

ABB has a number of policies and programs that help manage and sustain automation assets through their lifecycles. Learn how these policies and programs can minimize total cost, maximize return on investment and help derive added value from automation systems to meet ever changing business needs. This workshop will discuss the ABB Lifecycle Policy, 800xA software support policy, the software asset management program (Automation Sentinel), and the system evolution planning process. These topics will be discussed in the context of the financial arguments required to justify long-term system lifecycle management needs.

Session 5: 4:30 p.m. – 5:30 p.m.

WCS-29-1 System 800xA engineering with Function Designer and bulk tools

This technical workshop will provide to attendees a demonstration of ABB's System 800xA's Function Designer. Function Designer is a graphical tool which is used to create control logic via easy to read diagrams. You will also learn how System 800xA's bulk configuration tools can be used to rapidly create a project configuration using these logic diagrams.

WEDNESDAY, MARCH 25, 2009

Session 6: 8:00 a.m. – 9:00 a.m.

WCS-12-1 Fieldbuses and device integration with System 800xA

In an effort to lower lifecycle costs and improve productivity, many companies are integrating their intelligent field devices into their process control systems via fieldbus technologies. This enables them to exploit new levels of field device information in order to streamline work processes and maximize availability. Attend this workshop to learn how ABB's System 800xA seamlessly integrates intelligent field devices using the capabilities of aspect object technology, and makes this device information available in the right context to the right people at the right time.

Session 7: 9:30 a.m. – 10:30 a.m.

WSE-07-1 Verify compatibility of your security policies with the functionality of your control systems

Malicious activity and heightened regulatory environment make development and application of control system security policies necessary. Your policy compatibility with the functionality of your systems is important. ABB can test for compatibility and apply your security policies to your ABB products. This can simplify the process of determining what changes may affect system functionality. Learn more about the validation service robust offering, which provides auditing, testing, remedial actions and compliance maintenance activities.

Session 8: 11:00 a.m. – 12:00 p.m.

Session 9: 1:30 p.m. – 2:30 p.m.

WCS-11-1 Fieldbus FOUNDATION: Beyond the industry standard

FOUNDATION Fieldbus (FF) is already an internationally-recognized industry standard. Now let's look beyond basic process automation - to tomorrow's generation of digital communications. In this workshop, you'll gain an understanding of where FF is headed with regard to advanced NAMUR NE107 diagnostics, Safety Instrumented Functions (SIF), wireless technology and remote I/O. Anyone working with FF or budgeting for fieldbus-related projects, including system engineers, plant operators, system integrators and plant managers can benefit from attending this workshop.

Session 10: 3:00 p.m. – 4:00 p.m.

CCS-05-1 Control system networks, integration and architecture on the corporate network

The eternally difficult question: Do I allow my plant controls network (DCS, PCS, SCADA, etc) to be connected to the Corporate network or not? By allowing the connection visibility is gained; plant information can be used to increase business operations and efficiency as well as lowering overall costs of support by allowing remote access into the network.

At the same time, it also increases the potential for a security event to occur by 100%. Are the benefits enough to outweigh the risks? Can this new connectivity be implemented in a manner that allows enough protection to make the risk insignificant? While it may be hard to make the first step, a proper design and implementation of infrastructure and controls will allow for safe connectivity between plant control network and the business corporate network.

Session 11: 4:30 p.m. – 5:30 p.m.

WPG-06-1 Turbine automation for the industrial powerhouse application

In this workshop, participants will learn about the complete turbine automation capabilities of ABB for the industrial steam industry, including basic governor and extraction control, start-up sequencing, condition monitoring, mechanical/hydraulic retrofits, energy management and more. Brief case studies are included for the areas of condition monitoring, mechanical/hydraulic retrofits and energy management to highlight our complete complement of products and services in these areas. Features and functions of the turbine interface modules for System 800xA will also be discussed.

THURSDAY, MARCH 26, 2009

Session 12: 8:00 a.m. – 9:00 a.m.

WSE-06-1 Security and remote monitoring with System 800xA

Learn how System 800xA's inherent access control features, network architecture and integrated secure broadband remote access technologies enable reliable and secure remote monitoring. Discover various control system network configurations and secure communications technologies that can be used to make remote monitoring of your System 800xA viable.

Session 13: 9:30 a.m. – 10:30 a.m.

WCS-04-1 Configuring personalized workplaces for multiple monitors and large screens

This workshop focuses on how to better adapt the operator environment based on personal preferences. See how to configure an operator workplace for a single screen, as well as for multiple monitors and large screens. We will cover different display ratios/resolutions, workplace configuration, user configuration, view class configuration, navigation alternatives, display aspect links and display parameters. This workshop is a must if you are planning an operator environment with System 800xA using multiple monitors and large screens.

Session 14: 11:00 a.m. – 12:00 p.m.

WPG-05-1 Practical applications of fieldbus and wireless technologies in the power plant

Join us for a discussion and overview of the concepts behind the three fieldbus technologies (HART, PROFIBUS and FOUNDATION Fieldbus) and their applications in a power plant. We will compare the different architectures, integration components and various strengths provided by these fieldbus technologies. In addition, this workshop will address the variety of ways that wireless technology can be used in a power plant today.

Session 15: 1:30 p.m. – 2:30 p.m.

WPG-02-1 Energy management and optimization for the industrial powerhouse

Find out how model predictive technology can positively impact operating performance, and learn about ABB's capabilities in the area of advanced control solutions for the industrial powerhouse. A large co-generation facility with multiple boilers, turbines and headers is a complex process to operate, especially when process steam demand can vary quickly and the current economic situation with spot market prices for fuel gas and electricity always fluctuating. In this workshop, case studies will be presented of successful projects showing excellent economic results.

Session 16: 3:00 p.m. – 4:00 p.m.

TPG-02-1 Vibration monitoring basics

In this session, participants will learn about the basics of vibration measurement and analysis. Topics will include vibration basics, sensor types, sensor selection and condition monitoring applications. Our hardware and software products for condition monitoring will be introduced along with typical condition monitoring installations, target applications, case studies, and features and benefits.

Session 17: 4:30 p.m. – 5:30 p.m.

TPG-01-1 Reliable profitability for power

This presentation will focus on how the power generation, transmission and distribution industry can reduce cost per megawatt and increase system reliability. Industry specific examples of successes and challenges that can arise will be addressed focusing on how to capture departing knowledge, create a sustainable solid reliability culture, simulate and utilize existing data to make solid business decisions and ensure a quick return on investment. Attendees can expect to gain a basic understanding of how to reengineer work processes, quantify gains using effective metrics, uses of reliability modeling, change management tools and the change process.

Life Science Specialist

TUESDAY, MARCH 24, 2009

Session 1: 9:30 a.m. – 10:30 a.m.

TCS-23-1A System 800xA introduction

This training session will introduce the System 800xA Extended Automation System and the benefits it delivers. This overview presentation will exhibit how System 800xA extends functionality beyond that of other control systems through unparalleled connectivity, integrated applications and its many industrial IT enabled partners. This presentation sets the stage for many subsequent sessions and shouldn't be missed.

Session 2: 11:00 a.m. – 12:00 p.m.

WLS-01-1 Batch and continuous State Based Equipment Control: Engineering using PC Equipment Library

Could your plant benefit from an overall production improvement? State Based Control is a plant automation control design based on the principle that all process facilities operate in recognized, definable process states representing a variety of normal and abnormal conditions of the process. State Based Control implemented with the latest developments in object-based technologies, delivers direct benefits to its adopters in a variety of operational excellence categories. This results in productivity increases, higher asset utilization of both people and process, automated responses and recovery for abnormal conditions and provides an environment for knowledge capture directly into the control design.

Session 3: 1:30 p.m. – 2:30 p.m.

WLS-06-1 Process Analytical Technology (PAT) system introduction

This workshop presents a summary of ABB's Industrial IT for Process Analytical Technology (IIT for PAT) system including a discussion of the system set up, operation, its management of data, and integration with existing enterprise IT systems. The presentation will provide highlights of the benefits of ABB's latest release 2.0. The interaction of the PAT system with analyzers and a process control system will be discussed. In addition to the PAT system presentation in this workshop, a PAT system will be available for demonstrations in the life science industry booth in the exhibit hall throughout the event.

Session 4: 3:00 p.m. – 4:00 p.m.

WCS-13-1 Collaboration with the operator in focus

This workshop focuses on how you can better adapt the operator environment for a more collaborative and productive operation. The fact is that we will have a shortage of operators within 5-10 years. Therefore, it is important to put the operator in focus, to create a more attractive working environment and to design your control rooms to better accommodate the needs of the future, based on ergonomics and human factors. See how the features of System 800xA Operations and the Extended Operator Workplace can enable users to perform

operating tasks in a quicker, more secure way, saving time and money.

Session 5: 4:30 p.m. – 5:30 p.m.

WLS-04-1 NNE Pharmaplan: Identifying the ROI for PAT and automation investments

Since the FDA revolutionary white papers in 2004, the industry has talked non-stop about the potential of Process Analytical Technology (PAT) and more recently, Quality by Design (QbD). These topics have found regular spots in conferences, press and internal company discussions. It has been widely stated that the benefits are potentially huge, and that this way of developing and manufacturing life science products offers the opportunity to 'catch up' with other industries such as food and electronics, which have their processes down to a 'science' rather than an 'art'.

WEDNESDAY, MARCH 25, 2009

Session 6: 8:00 a.m. – 9:00 a.m.

WLS-05-1 Process Analytical Technology (PAT) applications: Benefits and experience from recent projects

This workshop will present the planning, installation and start up of Industrial IT for Process Analytical Technology (IIT for PAT) system at Abbott's North Chicago, Illinois facility, in addition to Campoverde, Italy and Puerto Rico installations. These PAT systems operate in Abbott's research and development area and are used to perform Design of Experiments (DoE) in support of the company's PAT initiative. This workshop will identify the many advantages of ABB's PAT system during the system design, development, installation, validation and the operational benefits that can be realized from a well-known process design space.

Session 7: 9:30 a.m. – 10:30 a.m.

CCS-09-1 Human Machine Interface (HMI) evolution: Bayer case study

In this workshop, the Bayer Corporation (Berkeley, California location) describes their control system evolution process. The presentation will include technical considerations, scheduling and the project management required for upgrading a MOD 300 Process Portal B control system to System 800xA, as well as subsequent integration with a third party Enterprise Resource Planning (ERP).

Session 8: 11:00 a.m. – 12:00 p.m.

WAN-01-1 Achieving sustainable performance with ABB FTIR analytical solutions

As the need for operation models that sustain environmental health becomes crucial, many companies are searching for new processes. This presentation examines ABB Fourier Transform Infrared (FTIR) analytical solutions, including implementation of process optimization, to achieve sustainable solutions in the pharmaceutical, hydrocarbon,

chemical, atmospheric and semiconductor industries. Benefits of utilizing ABB's expertise will be demonstrated. "To be a truly smart, agile enterprise, sustainability must become a core business strategy. Through implementation of sustainable practices, innovative companies continuously improve process performance while reducing environmental impact," says Mr. Simard, Chief Marketing Officer of ABB's Analytical Business Unit.

Session 9: 1:30 p.m. – 2:30 p.m.

TCS-22-1 System 800xA Batch Recipe Management

This workshop will provide a brief overview of the all key features of 800xA Batch Management. After the overview, the workshop will present in depth the Recipe Management features of System 800xA. Specific focus will be given to development of reusable components, versioning, formulation parameter management and flexible operator interface functions. The workshop concludes with a brief demonstration of 800xA Batch Management.

Session 10: 3:00 p.m. – 4:00 p.m.

WLS-07-1 Project execution benefits from GAMP5

Can your business benefit from reducing the cost and time of validation activities on projects? This presentation will show how ABB has adopted, and is using, the GAMP 5 principles to support the life sciences industry. The five key principles to be covered include: product and process understanding, life-cycle approach within a Quality Management System (QMS), scalable life-cycle activities, science based quality risk management and leveraging supplier involvement. ABB has been actively involved with GAMP since its inception in 1994.

Session 11: 4:30 p.m. – 5:30 p.m.

CLS-01-1 Zenith Technologies: Schedule, cost and maintenance advantages of using an object-based library

Zenith Technologies and ABB recently completed a multi-phased project for a UK based client. The brown field project involved replacement of an existing platform with 800xA. The success criteria for the project demanded that the plant be flexible to cater for multi-product production and modular flexibility. Installation of the process control system was completed over a short shutdown period. Post successful installation of the first phase, the validated object-based process control software was leveraged for phase II. The cost, schedule and development time scales were significantly reduced due to the design philosophies employed in phase I.

THURSDAY, MARCH 26, 2009

Session 12: 8:00 a.m. – 9:00 a.m.

CCS-03-1 Asset optimization through control system evolution: Bayer Berkeley

In this workshop, Bayer Corporation describes the collaboration between ABB and Bayer's Berkeley facility to evolve Bayer's existing control system to include System 800xA Asset Optimization. Strategy development, business needs, budget, goals and project results will be discussed, as well as Bayer's plans to capitalize on their asset optimization capabilities in the future.

Session 13: 9:30 a.m. – 10:30 a.m.

WLS-02-1 Benefits of evolution for life sciences manufacturing systems

ABB has developed solutions for protecting your investments in control system applications. This workshop covers control evolution strategies applicable to the life sciences industry.

Session 14: 11:00 a.m. – 12:00 p.m.

CLS-02-1 Pluses and pitfalls of planning an Enterprise Building Management System

In this case study, Mr. Sanjyot Bhusari explains how Affiliated Engineers developed their Enterprise Building Management System (EBMS). EBMS is a proactive way of managing and optimizing facility functions and business processes such as energy management and operations. Initial planning, budgeting, problem-solving, value of collaborating with suppliers and lessons learned - all will be addressed in this presentation. Regardless of whether your multiple-building campus supports life sciences, health care - or any industry - anyone considering an EBMS or supporting an existing EBMS project will benefit from learning more about this successful example by attending this workshop.

Session 15: 1:30 p.m. – 2:30 p.m.

WLS-03-1 CPM for life sciences

Manufacturing production operations can no longer operate with shop floor control separate from business management systems and remain competitive. The operations manager needs real-time insight to key performance indicators for the production processes, and real-time understanding of the impact on production commitments, Overall Equipment Effectiveness (OEE), and the return on investment from the production operation. Overall Equipment Effectiveness is a hierarchy of metrics, which focus on how effectively a manufacturing operation is utilized. The results are stated in a generic form that allows comparison between manufacturing units in the same or different industries.

Session 16: 3:00 p.m. – 4:00 p.m.

Session 17: 4:30 p.m. – 5:30 p.m.

Metals, Minerals, Mining, Cement System Specialist

TUESDAY, MARCH 24, 2009

Session 1: 9:30 a.m. – 10:30 a.m.

WMM-09-1 New installations with MPC in North America

In 2008, cement manufacturers started collaborating with ABB to further reduce energy costs by enhancing traditional fuzzy logic control with Model Predictive Control (MPC). Included in this workshop are case studies about two major cement manufacturers. One cement plant in Canada installed ABB's Economic Process Optimizer (EPO) with MPC to optimize heat balance and fuel costs in their pre-calciner. Another cement plant in the United States installed ABB's Expert Optimizer with MCP to increase production in their kiln and improve grinding in their finished cement mills.

Session 2: 11:00 a.m. – 12:00 p.m.

WMM-04-1 Industrial Mobile Ad Hoc Networks (MANET)

This workshop discusses the use of a broadband wireless system and the difference between a Layer 2 vs. Layer 3 implementation approach including use of VLANs to segregate traffic. The use of wireless provided considerable cost savings to provide converged services including IP video, VoIP, and use of SIP to provide Telepresence for remote collaboration with individuals across the globe and address critical issues that need to be reviewed in real-time. The wireless system is called Wave Relay™, a multi-hop wireless mesh network communication system which provides the ability to seamlessly connect users, devices and networks in challenging RF environments.

Session 3: 1:30 p.m. – 2:30 p.m.

WMM-02-1 cpmPlus Expert Optimizer 6.1: Reducing energy costs and operational complexity for industries

Rising competition and costs are eroding the profit margins of process industries. Optimization is essential to their survival, but constant process streamlining brings its own problems for operators. The new version of ABB's Expert Optimizer, a computer-based system for controlling, stabilizing and optimizing industrial processes, provides yet more functionality to effectively enable collaboration among the system components and thus increase productivity and profits. Two cases will be discussed: Optimization of a minerals flotation circuit, and management of an industrial steam plant in real time market conditions.

Session 4: 3:00 p.m. – 4:00 p.m.

WMM-05-1 Integrated and modularized approach for electrical systems in industrial plants

This workshop provides a view of integrated solutions to the electrical requirements of an industrial plant. The scope of supply encompasses the complete electrical design, equipment supply including equipment required for high-voltage switchyard, medium-voltage switchgear, power distribution centers, motors and drives and motor control centers, modularization, integration and pre-testing prior to

site installation. The discussion will cover the benefits of such an approach, as well as the collaboration with the EPCs to enhance their offering to customers.

Session 5: 4:30 p.m. – 5:30 p.m.

WMM-07-1 Large mills driven by ABB Frequency Converter

The way of powering mills has a long and technically interesting story. The tendency was dominated by the market demand, the advanced process possibilities and needs, and by the mechanical and the electrical technology. Mill sizes have now increased, and because the torque can not be transmitted by one pinion, twin pinion solutions have been the way to power the mills. However, the twin pinion solution was electrically only possible when load could be shared evenly between the two pinions. With a voltage source inverter drive system, this is nowadays achieved providing additional benefits to the process.

WEDNESDAY, MARCH 25, 2009

Session 6: 8:00 a.m. – 9:00 a.m.

WMM-11-1 Rollerpress: An energy efficient way to grind

The High Pressure Grinding Rolls (HPGR) became commercially available in 1985, and it was first used in the cement industry for the grinding of cement clinker where it reduced the energy consumption by up to 50 percent. This success paved the way for the HPGR to be used subsequently with great success in the mining of diamonds in 1987, iron in 1994 and hard rock (copper, gold and platinum) in 2005 with improvement of the wear protection of the rolls. ABB has the experience and skill to design the drive system in order to ensure a reliable long-term operation.

Session 7: 9:30 a.m. – 10:30 a.m.

WMM-08-1 Conveyor belts

ABB is a large supplier of solutions for the industry with a strong focus in the minerals market. Conveyors for mineral applications have become an interesting alternative to standard material transport method, especially due to the combination of innovative drive systems which are integrated within new generation of band conveyors. Today, these innovations allow a large degree of flexibility and a significant saving of capital investment and operational cost compared to traditional material transport. Integration of the drive system within mechanics, surrounding electrical equipment and control, is essential to fully benefit from those advantages.

Session 8: 11:00 a.m. – 12:00 p.m.**WMM-12-1 Ventilation on demand**

Deeper mines, multiple mining faces, new interest in previously mined out sections, increased awareness of health and safety, long lead time and expense of new ventilation shafts can all wreak havoc on your underground mine plan, production and ventilation requirements. This session will provide attendees with an overview of the "Optimized Mine Ventilation on Demand" system. The system is designed to dilute and remove hazardous substances, control the thermal environment, and provide oxygen for humans and mobile equipment engine combustion. The system optimizes energy management of the mine through automation.

Session 9: 1:30 p.m. – 2:30 p.m.**WFM-01-1 Concepts and benefits of Web tension control**

Consistent product quality cannot be achieved without proper measurement and control of the product tension in any web process, whether it be paper or metal sheet. This workshop will outline the numerous benefits and design principles used in load cell based tension systems. Collaboration between a well-designed ABB load cell based tension system, and an ABB plant control system can define a high quality supplier.

Session 10: 3:00 p.m. – 4:00 p.m.**WMM-06-1 Kiruna electric trucks**

Rising diesel fuel and ventilation costs, heightened concerns with health/safety/environmental conditions and greater demands for more production are the everyday daunting challenges in the underground mining environment. ABB's Kiruna electric trucks have been delivering solid ore haulage since 1958. ABB's electric underground haulage trucks offer considerable advantages over traditional ore transportation methods. Fast, efficient ABB electric trucks offer more production or fewer trucks for the same ore haulage, than traditional diesel fleets, while regenerating power back to the electrical system as their primary source of dynamic braking and saving energy. This session contains an overview of the Kiruna electric truck system.

Session 11: 4:30 p.m. – 5:30 p.m.**WMM-01-1 ABB helping Vale Inco create the "mine of the future"**

Using the PEpC model, Vale Inco Ltd. selected ABB early in the process, enabling product features to be fully utilized in the overall mine electrification and automation design. ABB's scope for the Totten Mine project includes a full suite of power and automation solutions, starting at the surface with 69kV substation, mine hoists, motors, drives, MCCs and instrumentation, throughout the mine surface plants and underground. The project is also considering control of underground airflow and quality with a "state of the art" ventilation on-demand system. The entire scope of supply is seamlessly integrated together with ABB's Industrial IT - 800xA automation system.

THURSDAY, MARCH 26, 2009**Session 12: 8:00 a.m. – 9:00 a.m.****WMM-10-1 Reactive power compensation and active filtering for low voltage DC drives: Industrial application**

In this presentation participants will learn more about a system solution with an IGBT Supply Unit (ISU) for reactive power compensation based on the standard ABB Industrial Drive. This application is used on a electric shovel with DC drives in a quarry under weak grid conditions. Additionally to the compensation of reactive power, the ISU is able to filter harmonic distortion to get a better voltage quality. The operation of ABB AC and DC drives at the same supply also provides an efficient system design with remarkable energy savings.

Session 13: 9:30 a.m. – 10:30 a.m.**WMM-03-1 Going green: Energy generation from waste heat**

High and rising electricity prices and the requirement to reduce CO2 emissions are strong drivers for innovative technical solutions. Energy intensive industries like cement and steel are looking for solutions to reduce their energy costs. An untapped energy resource is the vast amount of low temperature heat lost in many industry processes today. This session will provide answers to the following key questions: How does ABB's new type of small power plant convert the waste heat into electricity, without using fuel or generating CO2? What are the benefits and impact on energy efficiency?

Session 14: 11:00 a.m. – 12:00 p.m.**Session 15: 1:30 p.m. – 2:30 p.m.****Session 16: 3:00 p.m. – 4:00 p.m.****Session 17: 4:30 p.m. – 5:30 p.m.**

Oil & Gas Downstream

TUESDAY, MARCH 24, 2009

Session 1: 9:30 a.m. – 10:30 a.m.

TCS-23-1A System 800xA introduction

This training session will introduce the System 800xA Extended Automation System and the benefits it delivers. This overview presentation will exhibit how System 800xA extends functionality beyond that of other control systems through unparalleled connectivity, integrated applications and its many industrial IT enabled partners. This presentation sets the stage for many subsequent sessions and shouldn't be missed.

Session 2: 11:00 a.m. – 12:00 p.m.

WIN-04-1 Green instrumentation engineering practices in oil and gas applications

End user's business drivers include protecting health, safety and the environment while maximizing shareholder value. This workshop will share best practices in instrumentation engineering to help support end user business drivers. Fugitive emissions reduction, reduced utilities consumption and overall asset footprint reduction will be discussed. Several instrumentation design examples will be discussed in support of meeting big picture business objectives.

Session 3: 1:30 p.m. – 2:30 p.m.

COG-01-1A OIS/OIC evolution to 800xA workplaces at Petrobras REDUC Refinery

Petrobras REDUC Refinery had the most operator stations based on INFI 90 equipment. This workshop shows the evolution from OIS/OIC and Conductor NT Operation Stations to Process Portal A (PPA) using Harmony Connect interface on 800xA system. The project will also show the most important topics used during conversion, in order to reach a better performance with risk mitigation once these projects were made with a hot swap methodology. Important lessons of operational excellence, optimization, efficiency and productivity will be presented.

Session 4: 3:00 p.m. – 4:00 p.m.

COG-06-1 Oil movements blending and storage: An overview, execution process and benefits

Are you happy with your oil movements storage and blending solution? What questions should you be asking yourself? How can you link the refinery schedulers, the blend schedulers and the offsite operators together so that they work in a cooperative approach? What is the right split between the on-line real-time world and the off-line planning and scheduling world? What technology is currently available, and how does it work? Can the analyzers be made to work? We will discuss some typical project issues and experiences, and how these have been resolved.

Session 5: 4:30 p.m. – 5:30 p.m.

COG-05-1 Lady of Victorories: A power generation barge for Agip KCO

The 120 MWe (megawatt) power generation barge named "Lady of Victorories", has been delivered to provide electrical power to the Kashagan field. This field is the largest oil field discovered in the North Caspian Sea, where drilling complexity and hostile conditions demand exceptional power reliability. The Module No. 8 built by a Consortium formed by ABB SpA and Rolls-Royce Engineering Plc. was the first process barge to sail away to the Caspian Sea in April 2007.

WEDNESDAY, MARCH 25, 2009

Session 6: 8:00 a.m. – 9:00 a.m.

COG-10-1 Wireless I/O and enhanced gas well operation and production

Drilling multiple natural gas wells from a concentrated pad site has become standard operational practice over the last few years. The need to minimize the environmental footprint in many regions and horizontal drilling has been the driving force. The opportunity arising from this practice is the ability to control multiple wells from a single, centralized RTU capable of monitoring performance and performing optimization control functions. More capable low power RTU's coupled with the advance of wireless I/O radio technology provides lower cost systems and improved well performance.

Session 7: 9:30 a.m. – 10:30 a.m.

WOG-07-1 Operational Excellence: Taking full advantage of automation with SCADA

Is the process that benchmarks the automation in your company against industry best practices? Learn about the Operational Excellence process to help achieve the following benefits: cost reduction, productivity, reliability, work practices, safety and environment, support, maintenance and training. The Operational Excellence process identifies and documents enterprise opportunities for improvements that result in extracting high value from the investment in automation. It also changes the culture of an oil and gas company to make sure automation is used properly and to extract full value out of SCADA systems.

Session 8: 11:00 a.m. – 12:00 p.m.

Session 9: 1:30 p.m. – 2:30 p.m.**COG-11-1 Value proposition of implementing state-based control using PC equipment libraries**

Does the design of your process automation solution contribute to Operational Excellence (OpX)? Does your business expect to deliver higher asset capability with increased First Pass Prime production? Do you wish to prevent business interruption due to detectable and preventable events? If so, state-based control strategies delivered in a modular manner could provide a low cost, reliable solution to your business challenges. This paper will demonstrate the cost / benefit potential of implementing state-based control strategies using ABB Industrial IT PC Equipment libraries (process state enabled) and applying the principles of ISA 88 Part 5.

Session 10: 3:00 p.m. – 4:00 p.m.**WOG-04-1 Lifecycle simulation**

The 800xA control and safety system has a fully integrated simulator offering, Industrial Training Simulator (ITS), that allows the 800xA system to be integrated to any third party process model system by means of open standard OPC. The ITS system is a simulator version of the 800xA system allowing for full stimulation within a PC-based Soft-Controller environment. The approach has been carefully selected to allow the end customer to utilize their preferred modeling environment chosen from the marked leaders within the different process application areas, or their fleet standard in case the customers have standardized on a particular process modeling environment.

Session 11: 4:30 p.m. – 5:30 p.m.**COG-09-1 Wireless control/safety and I/O in a NGL salt dome storage facility: Oneok**

You have a legacy non-ABB DCS that costs more to upgrade than to replace. You are expanding your storage facilities operations and you need to be able to see remote sites like wellheads and brine ponds. You have no cable tray installed, and there is so much brine in the soil that buried conduit doesn't last. What do you do? Go wireless for control, safety, cctv and integration of flow computers with 800xA. In this session we will explore the upgrade of a Oneok Hydrocarbon Storage Facility.

THURSDAY, MARCH 26, 2009**Session 12: 8:00 a.m. – 9:00 a.m.****COG-08-1 Sakhalin II -Telecom challenges in providing latest technology in a project span of several years**

This case study reviews the issues associated with overcoming challenges of delivery of multiple telecommunication systems for a project spanning several years. Some of the situations reviewed will be interface handling, technology development and deployment. The case study features Sakhalin II, the world's largest oil and gas telecommunication project that consists of three offshore platforms, an onshore processing plant, an 800 km pipeline, booster station and several block valve stations and an LNG plant with shipping terminal.

Session 13: 9:30 a.m. – 10:30 a.m.**WOG-03-1 IT architecture security and safety for your oil and gas facility**

This session will focus on how to connect automation and monitoring systems to office networks in order to ensure a safe, reliable and user friendly environment. Key technologies are asset management systems, historians, wireless communication and remote access to your applications.

Session 14: 11:00 a.m. – 12:00 p.m.**WOG-10-1 Use and design of wireless in your oil and gas facility**

Wireless technologies have penetrated the markets within the consumer and electronics industries in the past years. However the maturity and reliability of the existing solutions to use in significant, close to the process, industrial applications is much newer to date. ABB has been delivering wireless technology to connect different parts of the extended automation system within oil and gas facilities. We now utilize the experience and lessons learned to also apply wireless sensor networks in a holistic and integrated fashion. An example of this is our entirely wireless solution for vibration monitoring of important industrial assets.

Session 15: 1:30 p.m. – 2:30 p.m.**Session 16: 3:00 p.m. – 4:00 p.m.****Session 17: 4:30 p.m. – 5:30 p.m.**

Oil & Gas Upstream and Electrical

TUESDAY, MARCH 24, 2009

Session 1: 9:30 a.m. – 10:30 a.m.

TCS-23-1A System 800xA introduction

This training session will introduce the System 800xA Extended Automation System and the benefits it delivers. This overview presentation will exhibit how System 800xA extends functionality beyond that of other control systems through unparalleled connectivity, integrated applications and its many industrial IT enabled partners. This presentation sets the stage for many subsequent sessions and shouldn't be missed.

Session 2: 11:00 a.m. – 12:00 p.m.

WOG-05-1 Oil and gas market Part 1:

Overview and trends

This presentation gives an overview of oil and gas emerging trends in solutions, execution methods and full scope electrical, instrumentation and control and telecom systems for the oil and gas market. The presentation is broadly divided in two parts: Part one "Overview and trends" describes recent and emerging trends in the market. Part two: "Meeting and satisfying the demands" presents products, solutions and working methods introduced by ABB in anticipation of these trends, illustrated by ongoing and recently completed cases.

Session 3: 1:30 p.m. – 2:30 p.m.

WOG-06-1 Oil and gas market Part 2: Meeting and satisfying the demands

This presentation gives an overview of oil and gas emerging trends in solutions, execution methods and full scope electrical, instrumentation and control and telecom systems for the oil and gas market. The presentation is broadly divided in two parts: Part one "Overview and trends" describes recent and emerging trends in the market. Part two: "Meeting and satisfying the demands" presents products, solutions and working methods introduced by ABB in anticipation of these trends, illustrated by ongoing and recently completed cases.

Sessions 4 and 5: 3:00 p.m. – 5:30 p.m.

COG-02-2 (NOTE: 2 hour session)

Full scope electrical, automation and telecoms project: Shell Ormen Lange

The Ormen Lange project had many challenges to overcome in project execution and providing operational excellence. By utilizing ABB's electrical, automation, safety and telecommunications products, systems and integration, overall project risk was reduced and operational excellence achieved. This provided common platforms for data to information and from the seabed to the onshore control and monitoring facility. Learn how your company can take advantage of these technologies and ABB's expertise in this arena.

WEDNESDAY, MARCH 25, 2009

Session 6: 8:00 a.m. – 9:00 a.m.

COG-04-1 Integrated operations and the future for oil and gas installations: TAIL

This session focuses on business value with use of integrated operations for upstream oil and gas fields. We will focus on case studies in operation, and current trends of new technology and methods. This session will fit those who are considering an upgrade of their installation and are looking into improved utilization of their process plant, extensive use of condition based maintenance, investing in new technology such as historian, wireless communication and asset management systems.

Session 7: 9:30 a.m. – 10:30 a.m.

WOG-02-1 Integrated electrical and automation systems

The gain in productivity, increased safety and life cycle cost that follows from integrating disciplines such as electrical systems and automation systems is a reality possible to exploit already today. However, the full potential of using a unified integration approach and share common infrastructure between equipment such as medium voltage protection and control relays, drives, switchgear, valves and instrumentation within the scope of an automation system is growing larger. Benefits such as extended common asset management for process and electrical subsystems, optimized power management and reduced cost for lifecycle support can be achieved using new industrial Ethernet-based features of 800xA.

Session 8: 11:00 a.m. – 12:00 p.m.

Sessions 9 and 10: 1:30 p.m. – 4:00 p.m.

COG-07-2 (NOTE: 2 hour session)

Peregrino wellhead platforms and FPSO: Integrated control, safety and power management

The Peregrino development project comprised of two wellhead platforms and a FPSO (Floating Production, Storage and Offloading vessel) produces 140,000 barrels/day of heavy crude offshore Brazil. This presentation gives an overview of the project, and will discuss technologies and execution strategies for the integrated control, safety and power management, as well as low and medium voltage electrical equipment under delivery by ABB. This project was complex in its execution, combining ABB offices in the United States and Norway with fabrication in Texas and Singapore, and final commissioning in Brazil. The presentation will be done jointly by ABB and EPC operator representatives.

Session 11: 4:30 p.m. – 5:30 p.m.**COG-03-1 IEC61850 at Petrobras REPAR Refinery**

The Power Management System at REPAR Refinery uses IEC61850 technology. This workshop will discuss the implementation of substation automation at the REPAR Refinery using Advant Controllers and the results reached. We will also present several new projects using digital relay technology with IEC61850 protocol, and how to integrate the new 800xA system with existing controllers, showing foreseen energy saving and increased efficiency.

THURSDAY, MARCH 26, 2009**Session 12: 8:00 a.m. – 9:00 a.m.****WOG-01-1 ABB capabilities for electrification within oil, gas and petrochemical markets**

This presentation will describe the new Center of Excellence for Electrification within oil, gas and petrochemicals, highlighting capabilities for different application areas. Additional areas of discussion will focus on concept studies, main references, R&D developments and technologies for power generation and distribution drives applications, as well as project MEC execution possibilities around the world.

Session 13: 9:30 a.m. – 10:30 a.m.**WOG-08-1 ABB remote services to support Shell Integrated Operations**

The rapid advancement of automation and information technology in the oil and gas industry requires a high level of expertise and resources to manage and maintain as it evolves, and to ensure security and optimization at all times. The ABB Service Environment™ has been developed specifically to meet these challenges. Included in this case study is an overview of the shared work processes, procedures and remote services delivered by ABB Service Environment™ to support the Shell Integrated Operations for offshore and onshore plants.

Session 14: 11:00 a.m. – 12:00 p.m.**Session 15: 1:30 p.m. – 2:30 p.m.****WOG-09-1 Technology and R&D in oil and gas**

Increasing complexity is a key feature of the oil and gas industry today. There is a need to support operations in various environments and geographically remote locations, while increasing efficiency, improving reliability and strengthening health and safety. This presentation will provide an overview of the impact that technology and R&D has on the oil and gas industry, and will illustrate the case through examples from a successful strategic initiative where we have deployed amongst other wireless, robotics and remote operations.

Session 16: 3:00 p.m. – 4:00 p.m.**Session 17: 4:30 p.m. – 5:30 p.m.**

Power Generation System Solutions

TUESDAY, MARCH 24, 2009

Session 1: 9:30 a.m. – 10:30 a.m.

TCS-23-1A System 800xA introduction

This training session will introduce the System 800xA Extended Automation System and the benefits it delivers. This overview presentation will exhibit how System 800xA extends functionality beyond that of other control systems through unparalleled connectivity, integrated applications and its many industrial IT enabled partners. This presentation sets the stage for many subsequent sessions and shouldn't be missed.

Session 2: 11:00 a.m. – 12:00 p.m.

WPG-01-1 DBDOC and your Harmony Symphony INFI 90 System

If you have Harmony (Symphony / INFI 90) at your plant, then attend this session to see how DBDOC strengthens your DCS system with a powerful search and navigation tool. Decrease time to troubleshoot problems, save money and maintain production. See why DBDOC, created by G. Michaels Consulting Ltd., is used around the world. If you already have DBDOC in your plant, see our new features that include trending internal values and minimizing the real-time data load, safe access from the Business LAN and new support for 800xA consoles. Integration with Smart-View will also be discussed.

Sessions 3 and 4: 1:30 p.m. – 4:00 p.m.

WCS-14-2 (NOTE: 2 hour session)

Getting the full value of ABB's Lifecycle programs

ABB has a number of policies and programs that help manage and sustain automation assets through their lifecycles. Learn how these policies and programs can minimize total cost, maximize return on investment and help derive added value from automation systems to meet ever changing business needs. This workshop will discuss the ABB Lifecycle Policy, 800xA software support policy, the software asset management program (Automation Sentinel), and the system evolution planning process. These topics will be discussed in the context of the financial arguments required to justify long-term system lifecycle management needs.

Session 5: 4:30 p.m. – 5:30 p.m.

WCS-29-1 System 800xA engineering with Function Designer and bulk tools

This technical workshop will provide to attendees a demonstration of ABB's System 800xA's Function Designer. Function Designer is a graphical tool which is used to create control logic via easy to read diagrams. You will also learn how System 800xA's bulk configuration tools can be used to rapidly create a project configuration using these logic diagrams.

WEDNESDAY, MARCH 25, 2009

Session 6: 8:00 a.m. – 9:00 a.m.

CMD-01-1 Life Expectancy Analysis of motors and generators: Reduce downtime and protect your investment

The Lifetime Expectancy Analysis Program (LEAP) is a systematic and unique approach to motor maintenance management. When motors and generators advance in age, the risk of failure increases. Unplanned downtime and repairs are extremely costly and can be prevented with a sound preventive and predictive maintenance program. LEAP offers proactive anticipation of repairs and replacements that extend motor lifetime and boosts ROI for the entire driven system. This workshop will cover the process and goals of LEAP, as well as discuss a specific case in which LEAP has been employed successfully for the customer.

Session 7: 9:30 a.m. – 10:30 a.m.

WSE-07-1 Verify compatibility of your security policies with the functionality of your control systems

Malicious activity and heightened regulatory environment make development and application of control system security policies necessary. Your policy compatibility with the functionality of your systems is important. ABB can test for compatibility and apply your security policies to your ABB products. This can simplify the process of determining what changes may affect system functionality. Learn more about the validation service robust offering, which provides auditing, testing, remedial actions and compliance maintenance activities.

Session 8: 11:00 a.m. – 12:00 p.m.

CPO-02-1 Solutions and strategies for power plant FGD and SCR environmental upgrades: Three case studies

This session will highlight several case studies involving different applications of the AQCS environmental upgrades for coal fired power plants and the solutions used to achieve the customer desired results. You will see examples of custom integrated solutions into 50+ year old power plants, along with new extensions including but not limited to: Power Distribution Centers (PDC's) housing low and medium voltage switchgear, liquid-filled and dry-type transformers, motor control centers, DCS equipment, bus duct, relay panels and current limiting devices.

Session 9: 1:30 p.m. – 2:30 p.m.

WCS-11-1 Fieldbus FOUNDATION: Beyond the industry standard

FOUNDATION Fieldbus (FF) is already an internationally-recognized industry standard. Now let's look beyond basic process automation - to tomorrow's generation of digital communications. In this workshop, you'll gain an understanding of where FF is headed with regard to advanced NAMUR NE107 diagnostics, Safety Instrumented Functions

(SIF), wireless technology and remote I/O. Anyone working with FF or budgeting for fieldbus-related projects, including system engineers, plant operators, system integrators and plant managers can benefit from attending this workshop.

Session 10: 3:00 p.m. – 4:00 p.m.

CCS-05-1 Control system networks, integration and architecture on the corporate network

The eternally difficult question: Do I allow my plant controls network (DCS, PCS, SCADA, etc) to be connected to the Corporate network or not? By allowing the connection visibility is gained; plant information can be used to increase business operations and efficiency as well as lowering overall costs of support by allowing remote access into the network. At the same time, it also increases the potential for a security event to occur by 100%. Are the benefits enough to outweigh the risks? Can this new connectivity be implemented in a manner that allows enough protection to make the risk insignificant? While it may be hard to make the first step, a proper design and implementation of infrastructure and controls will allow for safe connectivity between plant control network and the business corporate network.

Session 11: 4:30 p.m. – 5:30 p.m.

WPG-03-1 Harmony training simulator

Join this session for a discussion on ABB's Harmony Training Simulator (HTS). See how this product application allows Symphony controller module configuration to operate in a "virtual" environment on one or more PCs. A brief introduction to the HTS configuration will be included, as well as a discussion of the connection to Composer and to an operator console.

THURSDAY, MARCH 26, 2009

Session 12: 8:00 a.m. – 9:00 a.m.

CCS-11-1 AmerenUE replaces older training simulators with ABB Harmony Training Simulator

Learn how one customer, AmerenUE, migrated their fleet of older training 'stimulators' to the new ABB Harmony Training Simulator (HTS). The HTS application allows Symphony controller module configurations to operate in a virtual environment.

Session 13: 9:30 a.m. – 10:30 a.m.

WPG-04-1 Power plant optimization and NOx reduction made easy

Discover how your plant can achieve NOx reduction while simultaneously improving heat rate. This presentation will describe how ABB's Multivariable Model Predictive Control (MPC) application manipulates O2 bias, windbox bias, aux air dampers, over fire air dampers, furnace biases, mill biases and burner tilts. The controller's main objective is to keep NOx and opacity below maximum limits. Because a multivariable controller may have extra degrees of freedom, additional

optimization objectives are attainable. Learn how the extra degrees of freedom are used to reduce O2 and minimize reheat spray flow.

Session 14: 11:00 a.m. – 12:00 p.m.

WPG-05-1 Practical applications of fieldbus and wireless technologies in the power plant

Join us for a discussion and overview of the concepts behind the three fieldbus technologies (HART, PROFIBUS and FOUNDATION Fieldbus) and their applications in a power plant. We will compare the different architectures, integration components and various strengths provided by these fieldbus technologies. In addition, this workshop will address the variety of ways that wireless technology can be used in a power plant today.

Session 15: 1:30 p.m. – 2:30 p.m.

WPE-02-1 Power electronics for gas turbine based machines

The development of Power Electronics allows for sophisticated control of numerous aspects of gas or combined cycle gas turbine-based power stations. Static Frequency Converters (SFC) and excitation systems based on digital technology are at the heart of these controls. SFCs applied as a starting means for large gas turbine-generator sets and advances in excitation system technology provide improvement to the quality of the generator voltage and reactive power and control of the excitation system. This session offers an overview of SFCs and generator excitation systems and how the recent advances in technology can be applied in an upgrade project.

Session 16: 3:00 p.m. – 4:00 p.m.

TPG-02-1 Vibration monitoring basics

In this session, participants will learn about the basics of vibration measurement and analysis. Topics will include vibration basics, sensor types, sensor selection and condition monitoring applications. Our hardware and software products for condition monitoring will be introduced along with typical condition monitoring installations, target applications, case studies, and features and benefits.

Session 17: 4:30 p.m. – 5:30 p.m.

TPG-01-1 Reliable profitability for power

This presentation will focus on how the power generation, transmission and distribution industry can reduce cost per megawatt and increase system reliability. Industry specific examples of successes and challenges that can arise will be addressed focusing on how to capture departing knowledge, create a sustainable solid reliability culture, simulate and utilize existing data to make solid business decisions and ensure a quick return on investment. Attendees can expect to gain a basic understanding of how to reengineer work processes, quantify gains using effective metrics, uses of reliability modeling, change management tools and the change process.

Pulp & Paper Specialist

TUESDAY, MARCH 24, 2009

Session 1: 9:30 a.m. – 10:30 a.m.

TCS-23-1A System 800xA introduction

This training session will introduce the System 800xA Extended Automation System and the benefits it delivers. This overview presentation will exhibit how System 800xA extends functionality beyond that of other control systems through unparalleled connectivity, integrated applications and its many industrial IT enabled partners. This presentation sets the stage for many subsequent sessions and shouldn't be missed.

Session 2: 11:00 a.m. – 12:00 p.m.

WPP-06-1 Running paper machine drives with no pulse encoders

This workshop will discuss how the ABB patented Direct Torque Control can be used for paper machine drives systems with no-pulse encoders. With the traditional flux vector control, the pulse encoder is a must item in the system; however, with the Direct Torque Control, there is a way to calculate the actual torque and magnetizing flux with no speed feedback obtained at all. The encoderless run has become a very common practice with the ABB AC drive systems during the past five years.

Session 3: 1:30 p.m. – 2:30 p.m.

WPP-08-1 Web imaging overview and update

Over the past few years web imaging technology has seen remarkable advancement in the areas of image quality and classification accuracy. ABB's new generation of ultra-fast cameras, coupled with leading edge illumination technology, can now detect and identify all interesting defects found in papermaking processes and provide photorealistic images in real-time, even on the fastest production lines. This workshop will describe the latest improvements to ABB's industry-leading HDI800 system in the area of information usability and data integration with related ABB products, such as the System 800xA based QCS platform.

Session 4: 3:00 p.m. – 4:00 p.m.

WPP-05-1 Quality control system overview and update

This workshop provides an update on pulp and paper Quality Control Systems (QCS). Topics include an overview of current systems, latest developments and the use of the system to measure and control paper quality. The session also covers how to improve the efficiency and profitability of paper machine operation, interact with the organization, transmit appropriate data to the right place in the right form, work as a unifying force in the operation of the machine and its human caretakers, foster collaboration within the organization with internal and external resources and grow with your evolving needs.

Session 5: 4:30 p.m. – 5:30 p.m.

WPP-03-1 Cross direction actuator systems overview and update

This session will feature an overview of ABB cross direction actuator systems. Results from recent installations will be presented along with guidelines for selecting the most appropriate actuator for the application.

WEDNESDAY, MARCH 25, 2009

Session 6: 8:00 a.m. – 9:00 a.m.

WPP-01-1 ABB's Service Center of Excellence: Maximize performance of your existing automation assets

The mission of the Services Center of Excellence (CoE) for pulp and paper is to help our customers get more performance out of their assets. The Services CoE captures all of the best practices of ABB service from around the world and then standardizes and productizes them for all regions. This session will provide an overview of the best practices ABB service can provide your organization.

Session 7: 9:30 a.m. – 10:30 a.m.

WPP-04-1 Optimization services: Diagnosing pulp and paper mill process problems to maintain a competitive edge

Quickly resolving machine and process problems is crucial to maintaining a competitive edge. Paper makers know that process variations and control loop performance directly impact sheet breaks, grade changes, raw material consumption, sheet quality, production and overall machine efficiency. These issues can be daunting without a solid, continuous improvement plan. This workshop defines ABB's current paper machine optimization strategies, provides insight into solutions involving remote diagnostic services and demonstrates real world examples.

Session 8: 11:00 a.m. – 12:00 p.m.

WPP-07-1 Service Pro: An interactive, knowledge-based tool for maintaining ABB automation systems

Service Pro is an interactive software package filled with many years of ABB best practices pertaining to the proper preventative maintenance procedures for ABB automation equipment. This session will provide an overview of Service Pro capabilities and a live demonstration so participants can see the possibilities once implemented.

Session 9: 1:30 p.m. – 2:30 p.m.**WSE-01-1 ABB Process Optimization Methodology for any process or industry**

Learn about the methodology behind the ABB Process Optimization Services used to increase production, lower cost and improve Overall Equipment Effectiveness (OEE). A benchmark of current process performance is compared to industry standards, as well as actual operating data to expected capacity. This provides a basis for in-depth evaluation and identification of improvement areas and financial opportunities.

Session 10: 3:00 p.m. – 4:00 p.m.**WPP-02-1 Assured performance agreement: Cost effectively match service requirements with ABB capabilities**

An Assured Performance Agreement is a defined process used by ABB to provide the most effective service delivery for our customers. The program is scalable and flexible in order to best match your requirements with ABB capabilities. This session will outline the program deliverables - come see what ABB can offer you today.

Session 11: 4:30 p.m. – 5:30 p.m.**WSE-05-1 Remote optimization services: Leveraging remote access for delivery of global expertise**

Learn how ABB's subject matter experts from around the world can monitor, diagnose and optimize asset and process performance technologies. Vast amounts of data can be processed through rules engines and expert evaluations to provide valuable assessments and recommendations for optimized performance.

THURSDAY, MARCH 26, 2009**Session 12: 8:00 a.m. – 9:00 a.m.****WSE-06-1 Security and remote monitoring with System 800xA**

Learn how System 800xA's inherent access control features, network architecture and integrated secure broadband remote access technologies enable reliable and secure remote monitoring. Discover various control system network configurations and secure communications technologies that can be used to make remote monitoring of your System 800xA viable.

Session 13: 9:30 a.m. – 10:30 a.m.**WSE-04-1B Power plant performance optimization and lifecycle support**

Leverage ABB power plant process application expertise to drive continuous improvement of plant performance. Learn how your power plant can leverage an ABB tailored support program. Specific case studies will be used to illustrate how improvements were achieved in unit ramp rate, NOx levels, overall system stability and more.

Session 14: 11:00 a.m. – 12:00 p.m.**WRS-04-1 Overcoming an economic downturn with optimized maintenance management**

In times of economic slowdown, it is always good to remember the survival techniques used last time similar challenges were faced. On a corporate level, the first measure to prepare for a period of reduced demand and tight cash is to curb expenditure wherever possible. On the level of industrial asset management and maintenance, the prime strategy is often to postpone any major investments in plant renewals. With this comes an increased responsibility for the maintenance department. A professional and focused approach helps to live up to this responsibility.

Session 15: 1:30 p.m. – 2:30 p.m.**CCS-10-1 Klabin MA1100 project: Expansion and integration of a pulp and paper mill**

This presentation will describe how ABB, using the System 800xA Extended Automation platform, helped Klabin, the largest producer, exporter and recycler of paper in Brazil, to overcome the challenge of a production expansion within an existing plant. This was achieved without interfering in routine operations of the mill, integrating the new automation system with the existing DCS in a transparent way. Additionally, ABB extended the former DCS functionality, providing advanced features such as process simulator's interface, asset management and remote access to instrumentation and motors.

Session 16: 3:00 p.m. – 4:00 p.m.**WCS-07-1 Emerging technologies and the impact on automation systems**

New technologies are being released constantly. New ways of communicating and collaborating become more popular and widespread every day. New graduates have different experiences and expectations regarding technology and communications. When you think about cloud computing, RFID, social networking, next generation Microsoft software, nano-technology, wireless, and next generation fieldbuses and standards, you might wonder how all of these things can and should be applied to automation systems. Attend this workshop to hear thoughts and predictions from the automation technology experts.

Session 17: 4:30 p.m. – 5:30 p.m.

Water & Waste Water System Specialist

TUESDAY, MARCH 24, 2009

Session 1: 9:30 a.m. – 10:30 a.m.

TCS-23-1A System 800xA introduction

This training session will introduce the System 800xA Extended Automation System and the benefits it delivers. This overview presentation will exhibit how System 800xA extends functionality beyond that of other control systems through unparalleled connectivity, integrated applications and its many industrial IT enabled partners. This presentation sets the stage for many subsequent sessions and shouldn't be missed.

Session 2: 11:00 a.m. – 12:00 p.m.

WPG-01-1 DBDOC and your Harmony Symphony INFI 90 System

If you have Harmony (Symphony / INFI 90) at your plant, then attend this session to see how DBDOC strengthens your DCS system with a powerful search and navigation tool. Decrease time to troubleshoot problems, save money and maintain production. See why DBDOC, created by G. Michaels Consulting Ltd., is used around the world. If you already have DBDOC in your plant, see our new features that include trending internal values and minimizing the real-time data load, safe access from the Business LAN and new support for 800xA consoles. Integration with Smart-View will also be discussed.

Sessions 3 and 4: 1:30 p.m. – 4:00 p.m.

WCS-14-2 (NOTE: 2 hour session)

Getting the full value of ABB's Lifecycle programs

ABB has a number of policies and programs that help manage and sustain automation assets through their lifecycles. Learn how these policies and programs can minimize total cost, maximize return on investment and help derive added value from automation systems to meet ever changing business needs. This workshop will discuss the ABB Lifecycle Policy, 800xA software support policy, the software asset management program (Automation Sentinel), and the system evolution planning process. These topics will be discussed in the context of the financial arguments required to justify long-term system lifecycle management needs.

Session 5: 4:30 p.m. – 5:30 p.m.

WCS-29-1 System 800xA engineering with Function Designer and bulk tools

This technical workshop will provide to attendees a demonstration of ABB's System 800xA's Function Designer. Function Designer is a graphical tool which is used to create control logic via easy to read diagrams. You will also learn how System 800xA's bulk configuration tools can be used to rapidly create a project configuration using these logic diagrams.

WEDNESDAY, MARCH 25, 2009

Session 6: 8:00 a.m. – 9:00 a.m.

WCS-12-1 Fieldbuses and device integration with System 800xA

In an effort to lower lifecycle costs and improve productivity, many companies are integrating their intelligent field devices into their process control systems via fieldbus technologies. This enables them to exploit new levels of field device information in order to streamline work processes and maximize availability. Attend this workshop to learn how ABB's System 800xA seamlessly integrates intelligent field devices using the capabilities of aspect object technology, and makes this device information available in the right context to the right people at the right time.

Session 7: 9:30 a.m. – 10:30 a.m.

WSE-07-1 Verify compatibility of your security policies with the functionality of your control systems

Malicious activity and heightened regulatory environment make development and application of control system security policies necessary. Your policy compatibility with the functionality of your systems is important. ABB can test for compatibility and apply your security policies to your ABB products. This can simplify the process of determining what changes may affect system functionality. Learn more about the validation service robust offering, which provides auditing, testing, remedial actions and compliance maintenance activities.

Session 8: 11:00 a.m. – 12:00 p.m.

WIN-12-1 What's new in instrumentation for water and wastewater

This workshop covers trends in the instrumentation market, how ABB products are addressing them, and most importantly, how these trends and advances translate into tangible benefits to water and wastewater plant owners and operators. We will discuss both new measurement and control technologies and new applications for mature products and technologies, along with brief case histories where appropriate. Join us for a fast-paced and interactive session.

Session 9: 1:30 p.m. – 2:30 p.m.

WCS-11-1 Fieldbus FOUNDATION: Beyond the industry standard

FOUNDATION Fieldbus (FF) is already an internationally-recognized industry standard. Now let's look beyond basic process automation - to tomorrow's generation of digital communications. In this workshop, you'll gain an understanding of where FF is headed with regard to advanced NAMUR NE107 diagnostics, Safety Instrumented Functions (SIF), wireless technology and remote I/O. Anyone working with FF or budgeting for fieldbus-related projects, including system engineers, plant operators, system integrators and plant managers can benefit from attending this workshop.

Session 10: 3:00 p.m. – 4:00 p.m.**WIN-13-1 New energy savings schemes in wastewater treatment**

This session will explore several innovative uses of ABB instrumentation, motors and drives equipment in traditional applications that reduce the energy consumption and increase the users return on investment. The session will focus on reducing blower power consumption by integrating analytical measurements and low voltage motor drive strategies. Case studies of several customer installations will be reviewed and analyzed for their potential use in existing and new customer installations.

Session 11: 4:30 p.m. – 5:30 p.m.**WIN-14-1 Using wireless communications in non-critical and remote locations in the water industry**

The use of wireless solutions to reduce operating and installation cost will be the focus of this session. The session will include the use of cellular and telemetry applications in the water market. Applications for lift stations and remote water revenue installations will be examined and the benefits of replacing traditional SCADA with lower cost cellular technology will be explained.

THURSDAY, MARCH 26, 2009**Session 12: 8:00 a.m. – 9:00 a.m.****WSE-06-1 Security and remote monitoring with System 800xA**

Learn how System 800xA's inherent access control features, network architecture and integrated secure broadband remote access technologies enable reliable and secure remote monitoring. Discover various control system network configurations and secure communications technologies that can be used to make remote monitoring of your System 800xA viable.

Session 13: 9:30 a.m. – 10:30 a.m.**WCS-04-1 Configuring personalized workplaces for multiple monitors and large screens**

This workshop focuses on how to better adapt the operator environment based on personal preferences. See how to configure an operator workplace for a single screen, as well as for multiple monitors and large screens. We will cover different

display ratios/resolutions, workplace configuration, user configuration, view class configuration, navigation alternatives, display aspect links and display parameters. This workshop is a must if you are planning an operator environment with System 800xA using multiple monitors and large screens.

Session 14: 11:00 a.m. – 12:00 p.m.**WPG-05-1 Practical applications of fieldbus and wireless technologies in the power plant**

Join us for a discussion and overview of the concepts behind the three fieldbus technologies (HART, PROFIBUS and FOUNDATION Fieldbus) and their applications in a power plant. We will compare the different architectures, integration components and various strengths provided by these fieldbus technologies. In addition, this workshop will address the variety of ways that wireless technology can be used in a power plant today.

Session 15: 1:30 p.m. – 2:30 p.m.**Session 16: 3:00 p.m. – 4:00 p.m.****TPG-02-1 Vibration monitoring basics**

In this session, participants will learn about the basics of vibration measurement and analysis. Topics will include vibration basics, sensor types, sensor selection and condition monitoring applications. Our hardware and software products for condition monitoring will be introduced along with typical condition monitoring installations, target applications, case studies, and features and benefits.

Session 17: 4:30 p.m. – 5:30 p.m.**TPG-01-1****Reliable profitability for power**

This presentation will focus on how the power generation, transmission and distribution industry can reduce cost per megawatt and increase system reliability. Industry specific examples of successes and challenges that can arise will be addressed focusing on how to capture departing knowledge, create a sustainable solid reliability culture, simulate and utilize existing data to make solid business decisions and ensure a quick return on investment. Attendees can expect to gain a basic understanding of how to reengineer work processes, quantify gains using effective metrics, uses of reliability modeling, change management tools and the change process.