

Maintaining our leadership through times of major change in the utility industry

Over the past few years, a 'silent revolution' has been taking place in the utility industry. The main forces driving the changes are deregulation, increasing globalization, high pressure on performance improvement and a stronger focus on environmental factors.

Coping with, and responding to, these changes has created the need for not only a whole range of new technologies but an adaptation of existing ones, too.

ABB, as a world leader in supplying technologies, products and solutions to this industry, is committed to continue shaping its future through consistent and heavy R&D investment.

In this issue of *ABB Review* we are proud to present our vision of the future of the utility industry as well as results of our R&D. These can be broadly associated with devices and systems for:

- Optimizing the technical and economic performance of the grid, combined with a strong focus on asset management. The basis is provided by new simulation tools, as described in the articles on T&D consulting and transformer repair. This includes a consequent application of the whole portfolio of flexible AC transmission solutions (FACTS).
- The global grid of the future, with a stronger focus on distributed power generation. This changes completely the existing paradigm of network control and automation. Higher pressure on cost performance makes a



continuous improvement of traditional products a necessity. Examples are our new vacuum circuit-breakers, high-performance generator breakers and simplified dead tank devices.

On the economic side there is also a need for innovative solutions for risk-based management. One such solution is ABB's risk assessment and tracking tool, RIBA, described in this issue.

And last, but not least, ABB's vision of the future of this industry is clearly built on the strong integration of information technology. Our framework and platform of this integration is Industrial IT, which we apply throughout our product spectrum.

With this exciting walk through ABB's world of utility we want to share this vision with our readers.



Markus Bayegan
Chief Technology Officer

The electrical socket on the wall allows everyone to instantaneously benefit from dozens of power stations, hundreds of substations, thousands of kilometers of transmission cable, innumerable transformers, switches, relays and power quality devices as well as teraflops of computing power. And all it costs you is a few dollars a day.

The technology behind this amazing resource is evolving at an unprecedented rate, driven by deregulation, privatization and liberalization.

In this edition of *ABB Review*, we look at how ABB is participating in the power revolution.



Performance

The changing marketplace continues to present utilities around the world – whether state-owned or private, global or local, operating in liberalized or regulated markets – with both challenges and opportunities.

Traditional competencies alone are no longer sufficient to be able to thrive in today's, or tomorrow's, utility business environment. Energy companies are being pushed to perform – technically, operationally and financially – at increasingly higher levels. This means that suppliers, like their customers, have to intensify their performance efforts.

ABB's focus is on helping our customers improve their performance.

We seek to provide value for our customers by helping them get the most out of their existing assets and the highest possible return on their new investments.

We serve electric, gas and water utilities through a portfolio of economically attractive and environmentally sound products, services and systems. We also offer power products and systems that fit the specific needs of industry customers, for instance in the automotive, metals and petrochemical industries.

In addition, we are working with an increasing range of external channel partners. Original equipment manufacturers and engineering, procurement and construction firms benefit from world-class ABB power and automation products, enabling them to serve their customers better.

Speed, simplicity and transparency are the guiding principles in all our interactions with customers. This is also reflected in our development strategies for our products and production processes. We are currently streamlining our entire product portfolio to make it much simpler and better fit the global reach of our end-customers' businesses.

This and our commitment to Industrial IT – an integrating architecture for real-time information delivery – means that partnering with ABB will give our customers the ability to make swifter, better informed decisions across their entire enterprise. To enable our customers to tap the full potential of Industrial IT, we also invite other manufacturers to join us in the Industrial IT world with their products and systems.

Whether the need is to open new markets or maximize the profitability of established ones, ABB has unparalleled experience and the resources to develop your business.

Let us help you perform.



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