

## 2 Breaker Controlled Switching System

The **Toshiba Controlled Switching System (TCSS)** for circuit breakers has been developed to provide a sophisticated solution to eliminate unwanted electrical transients. Based on practical operational experience gained since 1989 Toshiba is now launching a new controlled switching system using the latest digital control and network computing technologies. The new switching controller features both high accuracy and high reliability for controlled switching, whilst also offering ease of operation and maintenance with its user-friendly web browser interface. The TCSS can be applied to shunt reactor opening for re-ignition free interruption, EHV overhead line closing to reduce surge voltage, capacitor bank closing and opening, and power transformer energization for reduction of inrush current and voltage fluctuation.



## 3 Industry Awards for

### Outstanding Technical Achievement

The IEEE Board of Directors has named 295 IEEE Senior Members to Fellow Grade effective 1 January 2008. The list includes three representatives of the global PAC community – Dr. Bogdan Z. Kasztenny, Canada; Vahid Madani and Kenneth Martin, USA. The grade of Fellow recognizes unusual distinction in the profession and is conferred by the Board of Directors upon a person with an extraordinary record of accomplishments in



any of the IEEE fields of interest. Dr. Alexander Apostolov, USA, received one of the three CIGRE Technical Committee Awards given for

2007 to recognize the outstanding contributions of a number of CIGRE Study Committee members to the work of their respective Study Committees.

## 4 Complete IEC 61850 Process Bus solution



GE Digital Energy delivers a complete IEC 61850 Process Bus solution for intelligent protection and control with the Multilin HardFiber™ System.

Replacing the need for thousands of copper wires in a substation, the Multilin HardFiber System replaces the copper wires with a few fiber optic cables.

Reducing this need to install and maintain copper wires, used for signaling and monitoring in substations, utilities can now save up to 50% of protection and control installation and maintenance costs, while at the same time increasing worker safety and power system reliability.



Bitronics M571



Remote display

## NovaTech **5** acquires Bitronics

NovaTech LLC, a provider of electric utility and process industry automation has acquired from AREVA T&D their measurement business assets, including the complete Bitronics Measurement Product line, its PowerServe®, MultiComm and other high-performance electricity measurement instruments. (see [www.novatechweb.com/bitronics](http://www.novatechweb.com/bitronics))

The measurement products will

continue to be designed and manufactured in Bethlehem, PA, by Bitronics LLC, a NovaTech affiliate, and will be marketed in the U.S. and Western Canada under the well-known Bitronics label.

Thanks to a strategic partnership agreement, NovaTech will supply, under the AREVA T&D MiCOM brand, the Bitronics products for their inclusion in the global AREVA offering.

## **6** P847 Phasor Measurement Unit

AREVA's new P847 Phasor Measurement Unit (PMU) is used to measure power system data in real time and report to a Phasor Data Concentrator for visualization, data storage and most importantly for running a variety of 'on line' and 'off line' applications in wide area control and protection. It is GPS synchronized and exceeds the requirements of IEEE C37.118 Level 1 with enhanced performance under off-nominal and dynamic system conditions due to an advanced frequency tracking algorithm.

The transmitted signals are phase currents, voltages, their derivatives, frequency, rate of change of frequency and 8 digital signals, all at speeds up to 50/60 frames per second. P847 also provides a wide range of protection and recording functions.



## **7** Make Complex Alarming Simple

Easy and economical means of annunciation

The new Schweitzer Engineering Laboratories' SEL-2523 Annunciator Panel provides an easy and economical means of annunciation in existing and new applications. It can be applied for various industrial, utility, and commercial uses. The flexibility of the communications and alarm configuration in this product allows it to be applied with little or no hard-wiring, providing great cost savings for the users. SEL-2523 Annunciator Panel features:

■ **Flexible Communications:** Provides up to 4 ports with common industry protocols

■ **Programmable Logic:** Implement complex alarms in logic

■ **Sequential Events Recorder:** Expedite installation and analysis with time-stamped records

■ **Rugged and Reliable Operation:** Meets stringent type tests

■ **PC Software and HMI:** Offers a simple user interface for device management with included software



SEL-2523 Annunciator Panel

## 8

**OMICRON**

among the 50 best employers  
in Europe

**OMICRON electronics** has again been rated among the 50 best European employers (small and medium sized workplaces) and has been awarded for it by the Great Place to Work Institute. The success is based on the employees and their personal commitment. OMICRON offers an interesting working environment which is characterized by open communication and teamwork which encourages personal development and technical excellence. 1250 companies of 15 EU member states take part in the Great Place to Work Award (see [www.greatplacetowork-europe.com](http://www.greatplacetowork-europe.com)). The evaluation is based on an anonymous survey among all employees and on an analysis of the value system, policies and practices that support the working environment and culture within the organization.



OMICRON's main office in Klaus, Austria



## 9 New Compact Protection Relays – Siemens

**Siemens enhances** its portfolio with the new SIPROTEC Compact 75J80 and 75K80 protection relays that share a brand-new and powerful hardware with well proven algorithms from SIPROTEC 4. The 75J80 relays can be used for line/feeder protection of high and medium voltage networks with grounded, low-resistance grounded, isolated or a compensated neutral point. The multifunctional 75J80 provides a directional overcurrent relay in a compact housing. The 75K80 was designed as a dedicated motor protection relay for asynchronous motors of all sizes. Both can be used as a backup relay to a transformer differential relay.



Both relays support IEC 61850 with GOOSE messages and integrated redundancy (electrical or optical). The relays feature flexible protection functions. Twenty additional protection functions can be created by the user. For example, a rate-of-change of frequency function or a reverse power function (ANSI#32R) can be created.