



GE Multilin  
215 Anderson Ave., Markham, ON, Canada L6E 1B3  
Tel.: (905) 294-6222, Fax: (905) 294-2098  
Email: [GEMultilin@indsys.ge.com](mailto:GEMultilin@indsys.ge.com)  
Web Site: <http://www.GEIndustrial.com/Multilin>

## Brazilian Utility Achieves High Reliability Using GE Multilin Relays

*CEMIG of Brazil to use Universal Relays in reliability improvement initiative*

**Markham, ON - August 20th, 2002** – With an increasing demand for a stable electricity supply, Brazilian utilities such as CEMIG are looking to invest in equipment that will help them ensure high reliability for their energy customers. CEMIG chose products from the Universal Relay family from GE Multilin to provide monitoring, control and protection functions at its FUNIL generating station. This major investment in equipment will provide a reliable and cost-effective solution that will allow future expansion as their application needs grow.

Local GE Value Added Reseller and system integrator Orteng won the bid for the FUNIL project, due to their successful application history and commitment to quality and value. The project includes the installation of **D60**, **F60**, **B30**, **C30**, **T60**, **G60** and **DGP** relays from GE Multilin. This utility application involves a generator plant with three 65 MVA turbines generating 10kV each. Three step-up transformers feed a 138 kV bus with three outgoing transmission lines: Lavras 1, 2 and Campo Belo. The functionalities of the relays are as follows:

Generator protection - G60 as the main	65 MVA Transformers – T60
and DGP as the backup	Feeders – F60
138 kV Bus with 6 circuits – B30	Data acquisition – C30
Overhead 138 kV lines – D60	

“GE Multilin helped us feel confident about choosing the UR G60 by agreeing to validate its performance characteristics specifically for the application at the Funil substation,” said André Luiz Medeiros Costa, Protection and Control Engineer from CEMIG. “In December 2001 the GE Multilin team invited us to their facility in Markham, Ontario to participate in Real Time Digital Simulator (RTDS) performance tests in their advanced relay testing facility. We ran the G60 through every scenario we could think of, and it passed with high grades. These specific application tests confirmed that the UR would help us to achieve both our current and future goals. This high level of service by GE really made us feel like not only a customer, but also a business partner.” Commissioning of Funil is scheduled for September of 2002.

*At the GE Multilin Testing Facility in Markham, Ontario, Canada are (left to right): André Luiz Medeiros Costa – CEMIG, Eduardo Gomes Batista – CEMIG, Dale Finney – GE Multilin Canada*



CEMIG has a history of choosing GE products for its electrical generation, transmission and distribution projects. More than 10,000 electrical protection devices supplied by GE have been installed in CEMIG's substations. These installed devices cover a wide range, including the vintage IAC, IAV, MOD III and BDD up to the most recent UR Family. Licinio Miranda, Sales Manager for GE Multilin in Brazil, comments that, "With a history of reliability, affordability, functionality and quality, CEMIG has made a solid investment with the UR that will support their growing requirements well into the future."

**About CEMIG:**

Celebrating its 50<sup>th</sup> anniversary in 2002, Cemig is Brazil's largest vertically integrated electric utility company. Its principal activities are the generation, transmission and distribution of electricity in the state of Minas Gerais. For more information, visit: <http://www.cemig.com.br/>.

**About Orteng:**

Celebrating its 25<sup>th</sup> anniversary in 2002, Orteng Equipamentos e Sistemas has established a presence among Brazil's major domestic suppliers of electromechanical and electrical equipment and systems. Orteng is both a Value Added Reseller and Distributor for GE products, and has developed technology partnerships in Brazil and abroad to provide the most advanced technology to benefit its clients. For more information, visit: <http://www.ortengrj.com.br/>.

**About GE Multilin:**

GE Multilin, a unit of the General Electric Company (NYSE: GE), is a global leader in the design, manufacture, sales and service of protection, metering, control and automation systems, as well as telecommunication networks for utility, industrial and general industry applications. For more information, visit the website at <http://www.GEindustrial.com/multilin>.

**About the UR Family:**

GE Multilin UR products are microprocessor-based solutions that support the open standard EPRI UCA™ MMS/Ethernet protocol. All UR products combine peer-to-peer high-speed communication capabilities with modularity, flexibility and field-programmable FlexLogic™ control for simplified substation automation. UR products include the B30 Bus Differential Relay, the B90 Bus Protection System, the C30 Controller, the C60 Breaker Management Relay, the D30 Line Distance Relay, the D60 Line Distance Relay, the F35 Feeder Protection Relay, the F60 Feeder Management Relay, the G60 Generator Management Relay, the L60 Phase Comparison Relay, the L90 Line Differential Relay, the M60 Motor Management Relay, the T35 Transformer Management Relay and the T60 Transformer Management Relay.

**For Further Information Please Contact:**

Christine Krokker  
Manager – Marketing and Sales Support  
GE Multilin  
905-201-2192  
[christine.krokker@indsys.ge.com](mailto:christine.krokker@indsys.ge.com)

- Ends -