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Indonesia's Largest Oil Producer Implements Cost Effective Automation And Control System Using GE Power Management Relays

PT Caltex Pacific Indonesian using fiber optic WAN to link Universal Relays for improved operations productivity

Markham, ON, February 12th, 2002 – PT Caltex Pacific Indonesian of Riau, Sumatra, is using [Universal Relay](#) (UR) technology from GE Power Management (GEPM) to achieve a cost effective automation scheme between 12 substations using an existing fiber optic Wide Area Network (WAN). The WAN is used to integrate all relays throughout the CPI Power System. GAE-Guna Elektro, PT, a local system integrator and GEPM Distributor and Value Added Reseller (VAR), completed the installation and will support the 50 URs now operating in 12 substations at the site as part of a pilot relaying system project. The contract includes the purchase of 38 [L90](#) Line Differential Relays, 4 [D60](#) Line Distance Relays, 10 [C60](#) Breaker Management Relays and 3 [T60](#) Transformer Management Relays.

Eddy Sudiarto, Business Development Advisor of GAE-Guna Elektro in Jakarta, Indonesia, says, "Caltex has always been a company that has been open to new technology, and like any oil company, are constantly looking at ways to gain more efficiency in their operations and improve productivity. The new substations, using UR technology, will help Caltex in their transition to full-scale automated monitoring and control. This will help them improve operations, reduce overhead cost and increase productivity at the site."



Panels with Universal Relays ready to ship from PT Guna Elektro to Caltex

Sudiarto adds that the installation of new UR protection system will support a new 230 kV line that is serving Caltex's overall production facilities. "Caltex recently moved to the 230 kV line to improve system stability," he says. "In the oil industry, maintaining daily production rates is critical. As the country's largest oil producer, Caltex produces on average 640,000 barrels a day. Downtime due to power failure could significantly reduce production rates."

WAN communications are based on the TCP/IP protocol. User configurable URPC software serves as the HMI software at Caltex's control center to allow for remote setting, monitoring and control, where users can receive a graphical representation of UR relay activity on the network. Existing SR750 relays have also been integrated with the URPC software, using Wonderware Intouch HMI to ensure all relay data is accessible from central control.

This current installation is part of a pilot relay project for the new substations. According to Sudiarto, "Caltex has already ordered new relays for three additional substations that they will be adding. With such a successful track record, we are confident that there will be many more great opportunities with Caltex in the future."

About Caltex:

PT Caltex Pacific Indonesia, commonly known as CPI, is a production-sharing contractor to Pertamina, the Indonesian state oil company. CPI employs approximately 6000 people with the majority of its employees in Central Sumatra, where it produces oil and natural gas from more than 100 oil fields, including the world-famous Minas and Duri fields. CPI today produces about half of Indonesia's total oil output. CPI and its predecessor companies have been involved in exploration and production in Riau since the 1920s. For more information, visit the website at <http://www.caltex-pacific-indonesia.com>

About GAE – Guna Elektro

GAE is an authorized GE Power Management distributor and Value Added Reseller based in Jakarta, Indonesia, and has been in the electrical, mechanical and telecommunication field for 40 years. It provides sales, installation, service and support services to major utility, industrial and commercial customers throughout Indonesia. For more information, visit the website at <http://www.GAE.co.id>

About GE Power Management:

GE Power Management, a division of GE Industrial Systems, is a global leader in the design, manufacture, sales and service of protection, metering, control and automation systems, as well as telecommunication networks and systems for utility, industrial and general industry applications. For more information, visit the website at <http://www.GEindustrial.com/pm>

About the UR

GE Power Management UR products are digital solutions that support the open standard EPRI UCA(tm) MMS/Ethernet protocol. All UR products combine peer-to-peer high-speed

communication capabilities with modularity, flexibility and field-programmable FlexLogic(tm) control for simplified substation automation. UR products include the B30 Bus Differential Relay, C30 Controller, C60 Breaker Management Relay, D60 Line Distance Relay, F35 Feeder Protection Relay, F60 Feeder Management Relay, G60 Generator Protection Relay, L60 Line Phase Comparison Relay, L90 Line Differential Relay, M60 Motor Management Relay, T35 Transformer Relay and T60 Transformer Management Relay.

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