ABB to build a 400-MW combined cycle power plant in Japan

An ABB joint venture with Japanese industrial conglomerate Kawasaki Heavy Industries (KHI), Japan Gas Turbine K.K. has won an order to build a 400-MW combined cycle power plant at Chiba, some 50 km east of Tokyo. The value of the project to ABB is US\$ 100 million. The order was placed by Kawasaki Steel Corporation, a leading Japanese steel manufacturer and independent power producer, who will own and operate the plant.

ABB will deliver a GT26 gas turbine, the steam turbine, the generator, the heat recovery boiler and the plant control system. Construction is scheduled to begin in January 2000, with commercial operation planned for 2002.

The new combined cycle plant will supply energy to Japan's largest power utility, Tokyo Electric Power Corporation (TEPCO).

This order is the first for a GT26 gas turbine to be received from an independent power producer in Japan.

Major orders for gearless drives for mining projects in Peru and the USA

Compañía Minera Antamina of Peru has placed an order with ABB Industrie AG, Switzerland, and ABB Generación S.A., Spain, for four gearless mill drive systems for the Antamina mining project in Peru. Besides the four drives, which have a total rating of 53 MW, ABB will deliver two main transformers rated at 125 MVA and 220/23 kV, filter systems and two 15-MVA synchronous condensers. The variablespeed gearless drives are designed for a nominal speed of 9 to 13 rev/min.

The project site is located in the Andes, at an elevation of 4,300 m above sea level. Operation is scheduled to begin in 2002. Daily production is estimated at more than 700 t copper and 400 t zinc.

A further order, for two 7.5-MW gearless drives, including compensation equipment, was received from Barrick Goldstrike Inc of Canada, the world's third largest producer of gold. The drives, for the gold mines Betze-Post and Meikle in Nevada, USA, are scheduled to begin operating in November 1999 and April 2000. The cycloconverterfed synchronous motors are designed for a speed range of 2 to 14.5 rev/min.

400-MW combined cycle power plant order from the UK

ABB has been awarded a turnkey contract to build and maintain a 400-MW combined cycle power plant in the UK. The order was placed by independent power producer South Coast Power Limited, a joint venture of Scottish Power PLC and CSW International Inc. The plant will be located at Shoreham on the south coast of England. The total value of the contract is about US\$ 215 million.

ABB will equip the plant with sequential combustion GT26 gas turbine technology and supply the steam turbine, generator and plant control system. In addition, ABB will be responsible for the engineering, procurement and plant construction as well as its maintenance for a period of six years. Commercial operation is planned to begin in the fourth quarter of 2000.

The GT24/26 gas turbines combine very high reliability and overall energy efficiency with low emissions, making them especially attractive to private power producers, who must meet increasingly stringent reliability, profitability and environmental performance targets. Shoreham is ABB's fourth combined cycle plant utilizing GT26 technology in the deregulated UK power market.

Swiss power utilities choose **DartNet®**

Romande Energie SA has placed an order worth US\$ 4.5 million with ABB Power Automation AG, Switzerland, for a DartNet system for two-way communication in its MV and LV networks.

DartNet is a newly developed PLC communications system with special advantages for remote meter reading, load management and distribution network automation. (An article on DartNet will appear in ABB Review 4/99.)

DartNet will be employed by Romande Energie SA to obtain data from approximately 12,000 customers, each site being equipped with an automatic meter reading and load control unit. The contract also covers delivery of a new network server, which will manage the communications network, including all load management and meter data as well as all control functions. Delivery of the core system and the first communications package is due by mid-1999. Other work and the installation of the units at customers' sites will be completed in the following two years.

Electrical equipment for cement mills in Egypt and Taiwan

Orders valued at approximately US\$ 20 million have been received by ABB Industrie AG, Switzerland, for electrical equipment for cement mills in Egypt and Taiwan. The customers are the Arab Cement Company and Taiwan Cement Engineering Corp.

ABB Industrie AG is to deliver the complete electrical equipment, consisting mainly of switchgear, transformers, drives and process control technology, for the Beni Suef cement mill in Egypt. Also part of the order is the engineering. Arab Cement Company plans to start up production at the plant at the end of 2000.

The order from Taiwan Cement Engineering Corp. is for process control and drive systems, including the engineering, project management and assembly work, for three new lines at the Hoping cement mill. The plant is situated on the east coast of Taiwan and will produce 8,600 t/day cement. Commissioning of the first production line is scheduled for the end of 1999.