

AREVA T&D STEPS UP TO MEET INDIA'S ENERGY CHALLENGES

By Don Horne

AREVA T&D held its 6th Technical Days Conference in India recently, and after two days of presentations and discussions, one thing was abundantly clear - India is on the cusp of becoming an economic giant, and AREVA is at the forefront of making that happen.

The session, held April 5 and 6, brought everyone up to date on the operations of the Transmission and Distribution division and India's energy challenges, the T&D market and associated strategy.

A tour of AREVA's Chennai plants was included in the itinerary, underlining the commitment of the French company in developing India's transmission and distribution needs and with an eye to expanding their export market.

AREVA is renowned the world over for carbon dioxide-free power generation and electricity transmission and distribution. It is also a world leader in nuclear power and the only company to cover all industrial activities in this field - but as the Chairman & CEO of AREVA T&D Philippe Guillemot was quick to point out, the technical days were about transmission and distribution in India, not nuclear.

The transmission and distribution arm of AREVA is but one of four divisions. They are:

NUCLEAR ENERGY

Front-End Division: involved in the nuclear fuel fabrication from uranium ore;

Reactors & Services Division: specializing in the design, construction and maintenance of nuclear reactors;

Back-End Division: dealing with spent fuel reprocessing and recycling operations, dismantling of decommissioned installations;

and separate from the nuclear divisions, the **T&D Division:** offering solutions for electricity transport.

The AREVA T&D division supplies products, systems and services for electricity transmission and distribution. They are used to regulate, switch, trans-

form and dispatch electric current in electric power networks connecting the power plant to the final user.

The division's customers are electric utilities as well as the oil, mining and metals, wind energy, paper and glass, transportation, and power engineering industries. This T&D division consists of the four following business units:

PRODUCTS

The Products business unit designs, manufactures and delivers a complete range of products covering every stage of electric power transmission and distribution.

The business unit operates production units in 25 countries on six continents. The group serves more than 30,000 customers around the globe. The key strengths of the Products business are its research and development expertise, its understanding of changing customer requirements, quality management, and optimized production site operations.

SERVICES

In addition to product-related services, the Services business unit provides network management services, operating support, and maintenance services to power companies.

The business unit offers medium- and long-term contracts covering the entire life cycle of its customers' electric power systems. These contracts allow power companies to optimize equipment costs and performance while ensuring operator safety.

SYSTEMS

The Systems business unit offers turnkey projects and grid management systems, offering their substation engineering experience, electric power supply system expertise, command of advanced technologies, and project management know-how.

AUTOMATION

The Automation business unit helps develop fully integrated energy management networks. The business is built around three main activities: automation and information systems, automation

products and application and support services.

The business unit supplies equipment and information technology systems, including computerized power management systems used to operate power transmission networks, determine customer needs and regulate the flow of power from power plants to the distribution network.

In Chennai, AREVA T&D has an automation plant in Pallavaram and a high voltage switchgear plant in Perungudi. Countrywide, AREVA T&D is looking to be a key player in developing ultra-high voltage in the Direct and Alternating Current fields.

A major component of the 6th Technical Days Conference was the input from local officials on the challenges that country faces (chronic power outages, rampant electricity theft and corruption, insufficient or aging infrastructure), and how best to overcome them. The massive \$12 billion Golden Quadrilateral highway express project in metro Delhi, the \$430 million International airport in Bangalore and Hyderabad's HITEC City are all examples of India's efforts to modernize its infrastructure - and ample evidence of the greater need to bring a stable supply of electricity to these areas.

A staggering 69,000 megawatts worth of projects have already passed the engineering and technical specifications for 2008-2012, with the majority of these projects already under construction (the remainder due to go to tender within the next nine months).

This Herculean increase in generation for India is indicative of the massive leap forward this country is taking as one of the premier nations of the world. AREVA's decision to invest and develop their transmission and distribution facilities in India made clear that the technical days were more than just talk, but a commitment of resources and expertise that will ensure AREVA will be a major player in what may very well be the world's next superpower in the 21st century.