

**MEASURES TAKEN DURING THE YEAR UNDER REVIEW**

The Fuji Electric Group divides R&D activities into two areas: group R&D and corporate R&D. In group R&D, each of the four business groups conducts R&D in areas directly related to its own field of operations. Corporate R&D includes the development of fundamental technologies that are relevant to the Company as a whole, as well as work in new areas yet to be assigned to any particular group.

A major undertaking during the year was the realignment of R&D along with the launch of the internal company system in April 1999. As a result, each of the four groups has been handed greater authority and responsibility for R&D and the allocation of R&D resources. The aim is to better align development activities with actual operations, giving a more flexible development structure in which the fruits of research see commercial application at the earliest possible stage.

We also undertook a comprehensive review of our R&D guidelines to incorporate greater market awareness. This resulted in a more systematic approach in which an awareness of R&D objectives is shared across the entire Fuji Electric Group. Until now, research had taken place in a diverse range of areas, with promising research projects being earmarked for further development. The new system stresses deliberation of research requirements at the outset, narrowing the focus to areas with potentially high levels of return or that are pivotal to future business development. The outcome is higher efficiency across all R&D operations.



**R&D HIGHLIGHTS OF THE YEAR**

In the Energy & Electric Systems Group, design and manufacture of a new series of two-pole air-cooled turbine generators with an output of up to 300 MVA started after the completion of prototype trials. Also, with a view to offering total logistics solutions services, work is progressing on a system that automatically measures electricity use in factories and office buildings and a GPS-based

transport management system for industrial waste vehicles. In the ED&C-Drive Systems Group, we developed a high-performance vector controlled inverter that yields the fastest response time in the industry, and a compact controller system for machinery that incorporates multi-function modular software. As a result, we were able to broaden our range of injection molding applications. In the Electronics Group, we developed a power supply IC for use in



mobile devices, as well as a power switching device that reduces high harmonics and electromagnetic noise. In the Retail Support Equipment & Systems Group, we developed a CPU board for vending machines that uses application software to monitor and transmit data on sales and demand. The result is greater convenience for the beverage makers and distributors who are our major customers in this sector. We also developed a coin mechanism with a slot-in

escrow function to prevent loss through counterfeit ¥500 coins.

#### **R&D POLICIES FOR THE CURRENT FISCAL YEAR**

During the fiscal year ending March 31, 2001, the focus will be on core operations that give the Fuji Electric Group its strong position in the industry. At the same time, we will develop businesses in the new growth areas of environment,

information systems, services and components. This calls for an R&D system that can produce results across groups. To accomplish this, we will pursue greater efficiency in all our R&D activities, proceeding in accordance with the R&D guidelines that we completely revised last year. The result will be a new offensive that calls for investing the equivalent of 4% of sales in R&D. We will rigidly adhere to this figure.

Three areas are being targeted this year: areas that can yield commercial results in a relatively short period of time; current areas of strength; and new IT solutions businesses. In the Electronics Group, we will focus resources on the development of new components in our specialty fields of power semiconductors, analog ICs and magnetic disks. In the ED&C-Drive Systems Group, we will concentrate on core components such as magnetic contactors and inverters. And in the Retail Support Equipment & Systems Group, we will develop solutions businesses related to vending machines and cold-chain equipment.



Fuji Electric's advanced transport management system provides real-time information on the position of industrial waste vehicles and the waste being transported by means of GPS satellites.