😮 The Kansai Electric Power Co., Inc. 🛛 Annual Report 2006 Business Focus: Demand and Supply

# Meeting steadily expanding demand through efficient use of resources, infrastructure and innovations



### Sales Poised for Expansion into the Future

In fiscal 2006 Kansai EP registered total electricity sales of 147.1 billion kWh, consti tuting a 1.5% increase from the year-earlier level and an all-time record. Sales expansion was largely attributable to increased demand for heating, driven by low temperatures throughout the winter season, amid the over all environment of economic recovery.

Going forward, moreover, now that the economy is securely on a recovery track, de mand for electricity, especially for use in homes and businesses, is expected to mark steady expansion on a long-term basis as liv ing standards continue to improve and as Japanese society becomes increasingly infor mation-intensive.

tractive rate schedules tailored to induce cus tomers to adopt these energy-saving systems. The burgeoning success of these initiatives is reflected in the gradual improvement in our load factor in recent years.

# In Pursuit of the Optimum Generation Mix

Japan, a nation of limited natural resour ces, is in a perennially precarious energy posi tion. To cope with this vulnerability, Kansai EP continuously pursues the optimum com bination of nuclear, thermal and hydro pow er, capitalizing on the respective advantages of each generation method to maximum effect.

Nuclear power forms the core of our en ergy platforms, meeting 46% of the Compa ny's total output demand. Nuclear power of

To cope with escalating demand for electricity, Kansai EP is exploring all viable avenues to optimize use of available resources and infrastructure.

## Making Maximum Use of Existing Facilities

Electricity sales expansion normally comes hand in hand with increases in peak demand. At Kansai EP, in order to cope with projected growth in demand at peak levels we are compelled to pursue ongoing devel opment of our power infrastructure. At the same time, in order to continuously enhance our competitive position, we must also maxi mize effective use of existing facilities while probing ways to minimize increases in peak demand. In line with these dual aims, we are taking a variety of steps targeted at improving our load factor.

Specifically, we are vigorously promoting the adoption of systems engineered for great er energy efficiency. Two notable examples are "Eco Ice" and "Eco Cute." Eco Ice is an innovative thermal-storage system that re tains power generated during nighttime hours, when demand is modest, and thereby makes a significant contribution to easing daytime peak system demand. Eco Cute is an electric heat-pump water heater that uses a natural refrigerant (CO2). We also provide at

fers us salient economic advantages because we pioneered its development, and this long record today yields benefits in terms of rela tively modest depreciation costs. Nuclear en ergy is also friendly to the environment as it produces low levels of CO2 emissions.

Thermal power, which offers superior flexibility to adjust to fluctuations in de







mand, is our second-most important source of energy. In this area, we are pursuing diver sification beyond oil dependency and striving for efficient operation of facilities by retiring or suspending, at length, operation of power plants plagued by poor efficiency or low load factor.

We have also proactively developed hy droelectric power, in view of this energy source's modest burden on the environment and the need to optimize effective use of Japan's available resources. Pumped-storage hydropower plants play a significant role in satisfying peak demand.



