The Kansai Electric Power Co., Inc. Annual Report 200 Business Focus: Demand and Supply

# Coping with steady growth in demand through efficient use of resources and infrastructure



## Sales Poised for Sustained Expansion

In fiscal 2007 Kansai EP registered total electricity sales of 147.3 billion kWh, consti tuting a 0.1% increase from the year-earlier level and a record high for the third consecu tive year. Sales expansion was largely attribu table to firmness in both corporate capital in vestment and production, which together offset a decrease in demand for heating re sulting from a record-warm winter.

Going forward, now that the economy is on a solid recovery track, electricity, especial ly for use in homes and businesses, is expec ted to mark steady sales expansion on a longterm basis as living standards continue to improve and as Japanese society becomes in creasingly information-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.

# 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 45% of the Compa ny's total output demand. Nuclear power of

In response to steadily rising demand for electricity, Kansai EP is probing all avenues to make optimal use of available resources and infrastructure.

## Existing Facilities Put to Maximum Use

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 demand,







is our second-most important source of ener gy. In this area, we are pursuing diversification beyond oil dependency and striving for effi cient operation of facilities by retiring or sus pending, at length, operation of power plants plagued by poor efficiency or low load factor.

We have also proactively developed hydroelectric 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.



