The Kansai Electric Power Co., Inc. Annual Report 2005 Business Focus: Demand and Supply

> Responding to expanding demand with infrastructure and innovations





Sales Set to Expand Well Beyond the Near Term

In fiscal 2005 Kansai EP recorded total electricity sales of 144.8 billion kWh, a 3.3% increase from the year-earlier level. The sales expansion was largely attributable to in creased demand for air-conditioning, driven by higher temperatures throughout the sum mer season, and solid production by the cor porate sector.

Going forward, moreover, now that the national economy is in a recovery trend, de mand for electricity, especially for use in homes and businesses, is expected to mark further expansion steadily on a long-term ba sis as living standards continue to improve and as Japanese society becomes increasingly information-intensive.

attractive rate schedules tailored to induce customers to adopt these energy-saving sys tems. The burgeoning success of these initia tives 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 position. To cope with this vulnerability, Kansai EP continuously achieves the opti mum combination of nuclear, thermal and hydro power, capitalizing on the respective advantages of each generation method to maximum effect.

Nuclear power forms the core of our en ergy platforms, meeting 43% of the Compa

With electricity demand poised for sustained expansion ahead, Kansai EP is exploring all 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 wide spectrum 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 our 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 are our electric heat-pump water heaters that use a natural refrigerant (CO2). We also provide ny's total output demand. Nuclear power of fers salient economic advantages because we pioneered its development, and this long re cord today yields benefits in terms of relative ly modest depreciation costs and a sustained high capacity factor. Nuclear energy 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 diversifica tion 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 Ja pan's available resources. Pumped-storage hy dropower plants play a significant role in sat isfying peak demand.

