

## Power Generation Facilities

Needless to say, modern society could not exist without electricity. As a power supply utilities company, OEPC bears a number of important public duties, principal among which are: to provide the same level of service to all users in Okinawa Prefecture; to guarantee an uninterrupted supply of power to the prefecture by ensuring that its energy (i.e. fuel) resources are always sufficient; and to make its best efforts to minimize the adverse effects of its business operations on the integrity of the environment.

An overriding concern of the management of OEPC is to plan the Company's supply of power from a long-term perspective, so as always to be one step ahead of the growth in demand. To this end, in planning and maintaining its power supply and transmission infrastructure, OEPC must constantly balance the requirements of economic viability and energy security, while building up its generation capacity so as to cope with the inevitable future growth in demand for power.

### The upward trend of electric power consumption

In fiscal 2005, total electric power consumption amounted to approximately 7.2 billion kWh, a year-on-year increase of 0.5%. Peak load was 1,363,000 kilowatts, or approximately four times the figure for 1972, the initial year of operations as OEPC. Regarding the prospects for electric power demand from here on, although energy conservation initiatives have acted to constrain demand growth, the increase in the number of customers - fueled by population growth - and the steady growth of the prefecture's economy (helped by promotion plans implemented by the central government) are expected to push up demand by an annual average of 2.0% over the next decade, easily outpacing the projected 1.2% annual growth for Japan as a whole.

### Expansion of power generation capacity

Japan imports approximately 80% of the fossil fuels used to generate electric power. Ever since the oil supply crises of the 1970s, particularly active efforts have been made to reduce the nation's dependence on oil by diversifying fuel sources. In Okinawa Prefecture, however, hydroelectric power generation is impossible because of the lack of suitable rivers, and the relatively small scale of demand for electric power in the prefecture does not justify the expenditure required to

construct a nuclear power station. The Company is therefore forced to rely principally on thermal generators, in which the fuel burned is either oil or coal.

To lower OEPC's dependence on oil further, we commenced construction our second coal-fired generation facility (after the Gushikawa thermal power plant), the Kin thermal power plant. Operation of the No. 1 generator at the new power station began in February 2002, followed by the No. 2 generator in May 2003. The Kin power station is enabling OEPC to cope with the strong growth in electric power demand on Okinawa Island.

Our next major power generation development project is the Yoshinoura thermal power plant, operation of which is scheduled to commence in fiscal 2011. This new plant will use LNG as its fuel. As the combustion of LNG emits very little carbon dioxide, it will not materially contribute to global warming. At the same time, the use of LNG is in line with the Company's policy of diversifying the types of fuel used, thereby further ensuring the reliability of our power supply service.



Kin Thermal Power Station

### Bolstering generation infrastructure on remote islands

OEPC constructs smaller power plants on islands remote from the prefecture's main island, and these power stations are, in many cases, connected to other even smaller outlying islands by undersea power cables. This is part of OEPC's effort to fulfill its public commitment to provide all residents of the prefecture with the same level of service.

### Power Transmission Facilities

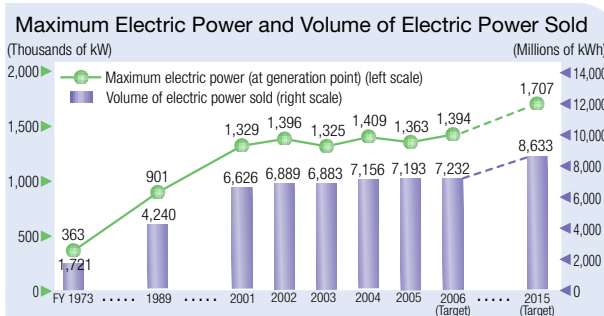
It is not enough simply to generate electric power – it must be delivered to the consumer – and to do this OEPC has built, and constantly maintains, an extensive network of high-voltage power transmission lines, transformer stations, and low-voltage local distribution networks. OEPC is directing its planning and investment in the construction and installation of generating facilities and its transmission network from an integrated perspective, taking fully into account demand trends in the prefecture and the overriding need to ensure a reliable supply into the indefinite future.

#### Our comprehensive network

At present, the Company's network of high-voltage power transmission lines connecting its power plants with its transformer stations (on Okinawa Island and all other islands of the prefecture), including above-ground and buried cables, measures a total of 906 kilometers. We operate 128 transformer stations, and the length of the low-voltage distribution line network connecting these stations with our customers (again, both overhead and underground), totals 10,516 kilometers. We are continuing to invest in the expansion and improvement of these transmission and distribution networks to cope with growing demand in Naha City and the surrounding region as well as to provide backup lines to ensure supply in all circumstances. This work is being carried out in coordination with the planning for the construction of the Yoshinoura thermal power plant.

#### Remote power control

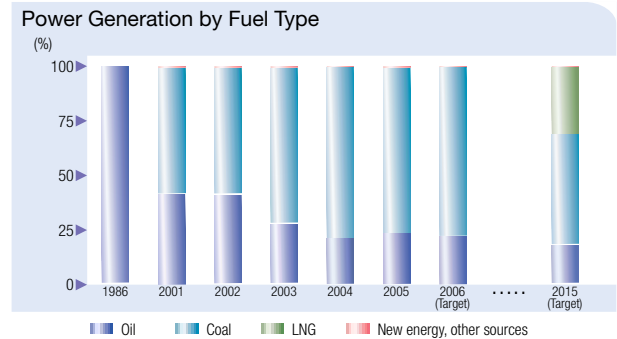
OEPC has established a remote control system for power load adjustment at power stations and current adjustments at transformer stations and over transmission lines, to precisely match power demand.



### Automated power distribution system

This is a system whereby computers in our local offices are connected via telecommunication lines with the switching gear mounted on power poles in each office's service area. The system enables staff at the offices to switch power to particular customers on or off, and to remotely monitor data on voltage and current. Previously, these operations required the offices to send employees to the site.

The system enables repair staff to restore service much more quickly when a line is severed by accident, and also allows the Company to more efficiently plan the construction of new infrastructure, as well as conduct services more effectively. It thus helps us provide our customers with a reliable power supply service at a reasonable cost.



### Laying local distribution lines underground

Urban redevelopment projects are being carried out in cities all over Japan as part of an overall concept of improving social infrastructure. The power utility companies are pursuing plans to take advantage of such redevelopment projects to dismantle their overhead local power distribution lines and lay them underground in these areas. In Okinawa Prefecture, too, we have been pursuing such initiatives since fiscal 1992, and by fiscal 2004 we had laid approximately 60 kilometers of underground power distribution lines. By fiscal 2009, we hope to have extended this by a further 30 kilometers.

