

# Multiple Ener Service Area

Osaka Gas Co., Ltd.

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“The lower barriers of market entry provide Osaka Gas with an opportunity to expand its energy business. Osaka Gas remains proactive in turning challenges resulting from deregulation into business opportunities based on its strategy of shifting to multiple energy services and geographically expanding operations.”

# gies and Expansion

## FAQ:1

What is your view of future deregulation, and how do you plan to respond?

## FAQ:2

Please describe the Company's multiple energy service strategy.

## FAQ:3

What is the status of the electricity business, and your outlook on future developments?



Osaka Gas invested in Nakayama Joint Power Generation Co., Ltd. in the fiscal year ended March 31, 2003, acquiring this 150-MW power plant in Osaka.



This 150-MW power generator began operations in April 2003 at the Torishima Energy Center (Osaka).



LPG recharging station operated by Nissho Iwai Petroleum Gas Group

### MULTIPLE ENERGY SERVICES AND GEOGRAPHIC EXPANSION IN ANTICIPATION OF DEREGULATION

Since the onset of deregulation in 1995, the pace of liberalization in the gas and electric power industries is expected to speed up in the near future. In the gas retail sector, liberalization currently applies to customers that contract for more than 1 million cubic meters of gas per year. The scope of liberalization is to expand, making the operating environment more challenging. From April 2004, liberalization tiers will be lowered to 500,000 cubic meters, for users including medium-scale factories and large-scale hospitals and hotels. From April 2007, the liberalization threshold is to decrease to 100,000 cubic meters, opening the market for small-scale factories, business hotels and schools to competition.

**1 Deregulation in the gas and electric power industries will trigger intense price competition. However, Osaka Gas views the lower barriers to entry into the energy sector as an opportunity to broaden the scope of its energy business. While remaining the preferred choice of customers, Osaka Gas aims to strengthen price competitiveness while taking steps forward on its strategies for multiple energy services and geographic expansion, as set forth in the new medium-term management plan INNOVATION CENTENNIAL.**

### MULTIPLE ENERGY SERVICES FOR ONE-STOP ENERGY SOLUTIONS

Energy customers want to choose the types of energy that are best suited to their business or lifestyles, and not be limited by either gas or electricity. **2 Accordingly, Osaka Gas must offer the optimal type of energy to customers, not just gas, in order for the Company to be customers' preferred energy provider. To do so, Osaka Gas is adding electric power and LPG operations to its traditional gas business in order to create a multiple energy services business that is able to provide customers with one-stop energy solutions.**

### LEVERAGING OUR STRENGTHS IN ELECTRIC POWER OPERATIONS

Osaka Gas is placing special emphasis on its electricity business. The Company has the following three major advantages in entering the electric power field.

Our first advantage is the effective use of assets. The Company is able to produce low-cost electricity thanks to its strong capability to procure LNG and far-reaching asset portfolio, including upstream infrastructure for natural gas, tankers for low-cost transportation, and LNG storage sites for the construction of power plants.

Second, we are able to take advantage of our accumulated know-how in solution mar-

keting and our customer network.

Third, we expect further deregulation in the electric power sector. The electric power industry is currently open to competition for customers with peak electricity demand of more than 2MW, such as large-scale factories and office buildings. From fiscal 2005, liberalization will expand to encompass customers that use more than 500 kW, such as large-scale department stores and hotels, and from fiscal 2006, customers of more than 50 kW, such as medium-scale factories and supermarkets. Plans call for the creation of a wholesale power exchange market and intermediary institutions in fiscal 2006. Taking these reforms as business opportunities, Osaka Gas will push forward into the electric power business.

### NURTURING ELECTRIC POWER INTO A SECOND BUSINESS PILLAR

**3 Osaka Gas is endeavoring to expand the electric power business into a core business second only to the natural gas business. By around 2010, the Company plans to achieve 2,500 MW of power generation capacity, as**

**well as sales of ¥120.0 billion and ordinary profit of ¥10.0 billion from power retailing and wholesaling.**

In the independent power producer (IPP) field, Osaka Gas has been supplying wholesale electricity to the Kansai Electric Power Co., Inc., since April 2002, following the construction of a 150-MW power generation facility at its Torishima Energy Center. Osaka Gas was the first gas company to foray into the IPP field. In March 2003, the Company invested in Nakayama Joint Power Generation Co., Ltd., in Osaka, and Nakayama Nagoya Joint Power Generation Co., Ltd., in Aichi Prefecture, adding their power generation facilities. In aggregate, the three power generation bases, including the Torishima Energy Center, boast 450 MW of generating capacity.

In the retail sector, Osaka Gas subsidiary Ennet Co., Ltd., supplies a total of 80MW of electricity to 25 customers, including the prefectural government office buildings of Hyogo and Osaka. To meet increasing demand for electricity in the retail sector, Osaka Gas is steadily securing new power sources.

Note: For a definition of ordinary profit, please refer to the note on page 7.

## FAQ:1

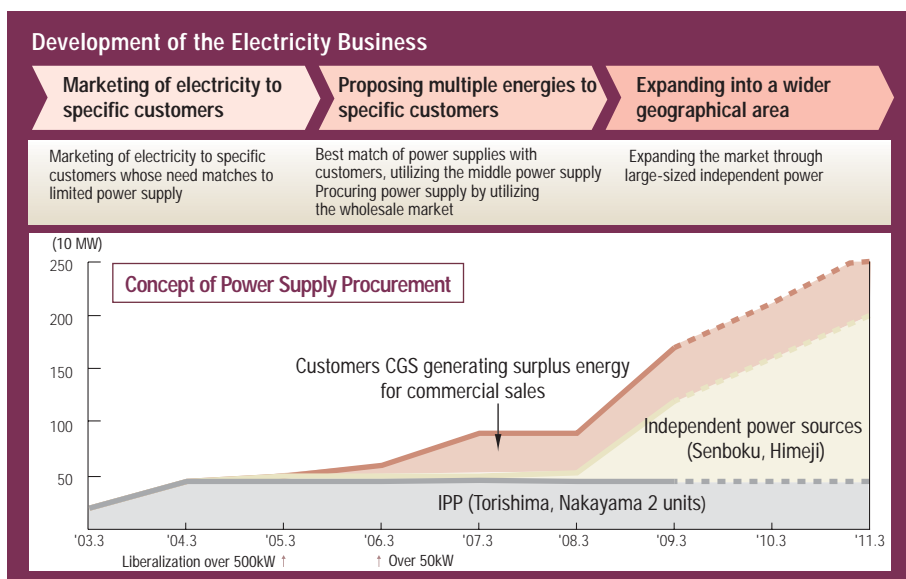
What is your view of future deregulation, and how do you plan to respond?

## FAQ:2

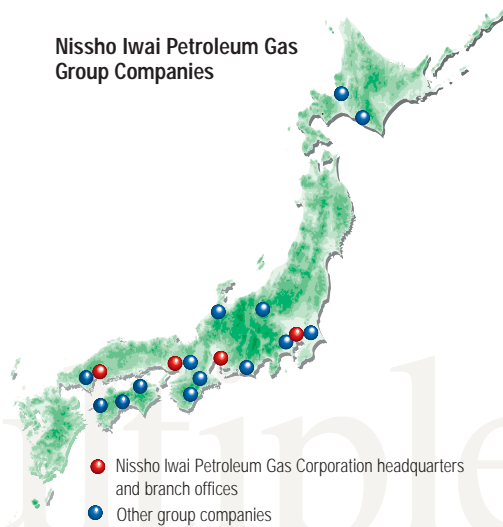
Please describe the Company's multiple energy service strategy.

## FAQ:3

What is the status of the electricity business, and your outlook on future developments?



### Nissho Iwai Petroleum Gas Group Companies



At its Himeji LNG Terminal, the Company is constructing a 50MW power plant scheduled to start operations in 2004. At its Senboku Terminal, the Company plans to build a large-scale power plant to generate 800MW from fiscal 2009, and an additional 800MW from fiscal 2011, for a total of 1,600MW. In conjunction with these plans, we began to conduct environmental assessments of these projects.

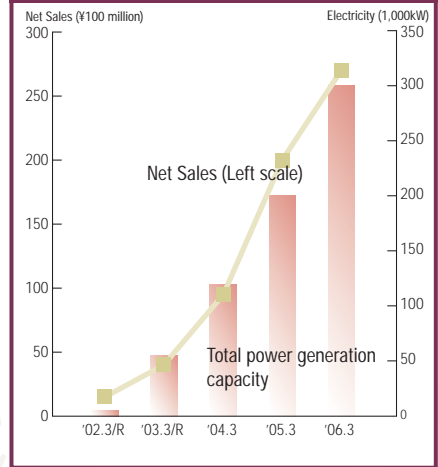
#### EXPANDING BEYOND THE KANSAI REGION

**4** Recently, some Osaka Gas customers have strongly expressed a desire for an all-in-one provider of services for their energy-related needs. For example, an increasing number of our corporate customers with plants spread across Japan would like to receive integrated service solutions from Osaka Gas. To fulfill this need, and to grow beyond our traditional gas supply service area in the Kansai region, Osaka Gas is implementing a strategy to expand its marketing base and to diversify earnings sources.

#### LPG AND COGENERATION SYSTEM: KEYS TO EXPANSION STRATEGY

Since it is simple to supply, LPG is the optimal form of energy for our geographic ex-

#### Sales Plan of Cogen Techno Service Co., Ltd.



pansion strategy. In September 2000, Osaka Gas acquired Nissho Iwai Petroleum Gas Corporation, a primary distributor and wholesaler of LPG nationwide, as the first major step of its expansion strategy. Up until that date, the Liquid Gas Group had supplied industrial gases and LPG. With the addition of the Nissho Iwai Petroleum Gas Group and its nationwide network, however, the Company's wholesale and retail operations for LPG were extended over a wider area.

Cogeneration systems are another key to our expansion strategy. Using its accumulated expertise in cogeneration systems, Osaka Gas established Cogen Techno Service Co., Ltd. (CTS), in June 2001 through financing from 10 other companies. CTS provides integrated energy solutions, including cogeneration-related services, engineering, maintenance, and financing services for energy systems, to factories, hospitals, hotels, and commercial facilities throughout Japan. Installed power generation capacity at CTS facilities stood at approximately 51MW as of April 2003.

#### INVESTING IN GROWTH WHILE REINFORCING A SOUND CORPORATE STRUCTURE

**5** Osaka Gas began using shareholder's value added (SVA) as a management benchmark in the fiscal year ending March 31, 2003. Accordingly, the Company is working to increase shareholder value by emphasizing cash flow in management while taking the weighted average cost of capital (WACC) into consideration.

To boost cash flow, we are continuing efforts to reduce expenditures, including maintenance costs, and aim to reduce labor and capital costs through personnel rationalization and more efficient capital investment. As a result, we are gradually reducing fixed costs such as general expenses, capital cost and labor expenses, per cubic meter of gas sales volume. In the future, Osaka Gas plans to thoroughly reduce costs in each stage of operations, from LNG procurement, production and transport to sales.

The Company is aggressively investing in new businesses expected to produce high profit margins, and has already established a unified set of guidelines for return on investment for the Group. Investment guidelines that the Company implemented in 2000 are based in principle on net present value

after deducting a hurdle rate that takes into account the special characteristics of each business and the cash flow generated from each investment project. These investment guidelines are special in two ways. First, they factor in an appropriate level of expected risk, including residual value (terminal value) after the conclusion of the investment evaluation period. Second, they clarify conditions for withdrawing from the business when the investment decision is made, and also continue to follow up on investment projects after the launch of the business.

During the three years from April 1, 2003, to March 31, 2006, Osaka Gas expects to generate consolidated cash flow of ¥210.0 billion, and based on these investment guidelines, allocate this cash to areas of high growth potential to expand operations, including power plants, customers' cogeneration systems with surplus capacity for commercial power sales, cogeneration systems and other electric power projects, gas fields, LNG tankers and other upstream gas-related business, as well as the extension of gas pipelines.

## FAQ:4

Can you explain more about the geographic expansion strategy?

## FAQ:5

What are the investment criteria for new business investment? Where is the source of funding?

