

Launch of Services for Power Business Operators to Predict Power Demand and Generation

--First paid service utilizing proprietary weather predicting-related technology--

July 3, 2023

Osaka Gas Co., Ltd.

Kansai Business Information Inc.

On July 1, Osaka Gas Co., Ltd. (Representative Director and President: Masataka Fujiwara, hereinafter referred to as “Osaka Gas”) launched a service to predict power demand and generation using its proprietary weather predicting technology^{*1} and AI (together, hereinafter referred to as “weather forecasting-related technology”). This is the first paid service utilizing proprietary weather forecasting-related technology.

This service is proposed and sold by Kansai Business Information Inc. (Representative Director and President: Kazuhiko Takeeda), a wholly owned subsidiary of Osaka Gas.

Currently, many electricity retailers predict daily power demand, make demand plans, and operate a retail business. In addition, electricity generation utilities operate an electricity generation business while predicting the amount of power to be generated each day and making a power generation plan.

If the plan and actual performance of power demand and supply (power generation) do not match, an imbalance will occur, affecting the profitability of the power business. For this reason, it is necessary and important for electricity utilities engaged in the power business to predict power demand and generation volume, and Osaka Gas has been developing predicting technologies and utilizing and improving them in its own power business.

This service combines proprietary weather predicting technology and AI to predict power demand and solar and thermal power generation and sell prediction data to electric power companies.

In addition to improving the efficiency of the daily operations of electric power companies, this is expected to contribute to the improvement of income and expenditure^{*2} by reducing the difference (imbalance) between planned power generation (demand) and actual values.

We have already signed contracts with several major energy companies to provide power demand predictions, and the service started on July 1.

■ Power demand AI prediction

This prediction predicts demand for grid electricity and demand for customer’s electricity of electricity retailers. AI that learns the correlation between past weather information and actual power demand based on weather prediction data, such as temperature, which has a large impact on power demand, and information, such as the day of the week, makes highly accurate forecasts.

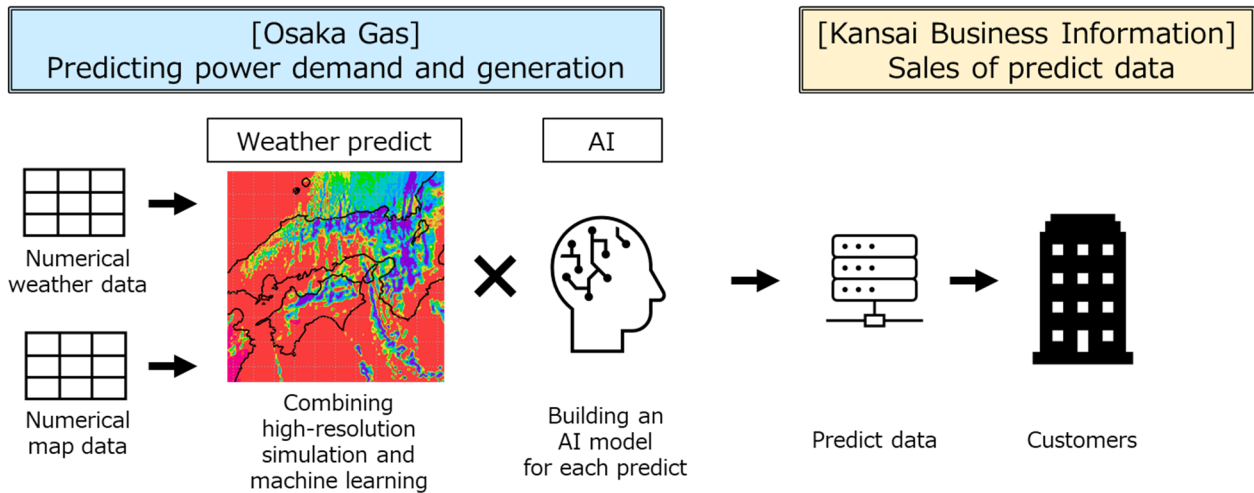
■ Solar power generation AI prediction

This prediction predicts the amount of power generated of a solar power plant. AI that learns the correlation between past weather information and actual power generation based on weather forecast data, such as solar radiation, which has a large impact on power generation, and information, such as power plant location and power generation equipment, makes highly accurate forecasts.

■ Thermal power generation AI prediction

This prediction predicts the amount of power generated by gas turbine thermal power plants. AI that learns the correlation between past weather information and actual power generation based on weather forecast data, such as temperature and atmospheric pressure, which determine the density of the air that has a large impact on power generation, and information on power generation performance and operating conditions, makes highly accurate forecasts.

■ System for providing this service



Osaka Gas began researching weather prediction in 2008, and in 2013, it began using the results of its own prediction in its own energy business, which is strongly influenced by weather conditions. We have also worked to improve accuracy through the use of AI. Currently, we are promoting service development, demonstration, and trial operation in the fields of railways, agriculture, and construction using our proprietary weather forecast-related technology, and we are also aiming to make these services a paid service.

The Daigas Group remains committed to becoming a corporate group that contributes to further improving its customers' daily lives and businesses by making the most use of the technology and know-how it has developed in the energy business.

*1: Our company's weather prediction enables detailed prediction that takes topographical effects into consideration by dividing the forecast area into small high-resolution meshes and performing data analysis. Machine learning based on observation data is combined for even higher accuracy.

*2: Power generation (retail) companies settle charges according to the amount of imbalance with general power transmission and distribution companies.

Generally, unbalanced unit prices fluctuate wildly and affect profitability, so matching plans with actual results can stabilize and improve earnings.

<Corporate Profile>

■ Osaka Gas Co., Ltd.

Head office	4-1-2 Hiranomachi, Chuo-ku, Osaka
Establishment	April 10, 1897
Representative	Masataka Fujiwara, President and Representative Director
Main business	Production and sale of gas; generation and sale of electricity, etc.

■ Kansai Business Information Inc.

Head office	Sumitomo Nakanoshima Building 7F, 3-2-18 Nakanoshima, Kita-ku, Osaka
Establishment	December 20, 1985
Representative	Kazuhiko Takeeda, Representative Director and President
Main business	Survey, analysis, and consulting services Business process outsourcing for contact centers, sales, clerical work, etc. Planning and operation of sales promotions, planning and production of web systems Planning and operation of business training and e-learning Architectural design supervision, construction contracts