

Launch of Demonstrative Experiment for the Realization of Solar Power Forecasting Services on the Assumption of Independence from FIT

October 1, 2019
Osaka Gas Co., Ltd.

Osaka Gas Co., Ltd. (President: Takehiro Honjo; hereinafter, "Osaka Gas") today announced that it had reached agreement with a German operator of a virtual power plant (VPP^{*1}), called "Next Kraftwerke" (co-chief executive officer: Hendrik Sämisch and Jochen Schwill; hereinafter, "NXK"), regarding joint implementation of a demonstrative experiment on solar power forecasting. From today, a demonstrative experiment for the realization of highly-accurate solar-power forecasting services will begin at Yura Solar Power Plant (south) owned by Yura Wind Power station Co. (President: Munehiro Ito), which is a wholly owned subsidiary of Gas and Power Co., Ltd. (President: Munehiro Ito), a wholly owned subsidiary of Osaka Gas. Osaka Gas has been working toward improving the accuracy of short-range weather forecasting technology, as seen in its registration as a weather forecast service company authorized by the Japan Meteorological Agency in September 2018. The aim is that this experiment will help achieve a high level of accuracy in solar power forecasting by making forecasts in a timely manner while taking into account weather changes occurring up to an hour before.

In Germany, where renewable energy is now widely used, the FIT scheme, under which renewable energy is purchased at fixed prices, was adopted in 2000. Later, in 2012, to integrate renewable energy into the electricity market, the country introduced the FIP^{*3} scheme, under which a power purchase price is determined by adding a premium^{*2} to the market price. In step with this, renewable energy companies have begun to carry out renewable energy forecasting. Therefore, services such as accurate forecasting of renewable energy output, which fluctuates significantly, and marketing on behalf of renewable energy companies, have come to be considered as business opportunities by many companies. NXK is one of these companies, boasting extensive experience in this field, such as the management of photovoltaic power generation of 3,100 MW in Germany.

Meanwhile, in Japan, the FIT scheme has been adopted since 2012 for the purpose of encouraging the use of renewable energy. The interim report of the Subcommittee on Mass Introduction of Renewable Energy and Next-Generation Electricity Networks points out the necessity for renewable energy to become independent of the FIT scheme and to be integrated into the electricity market. It is considered that services similar to those in Germany will become necessary in the future.

Osaka Gas has been making various efforts to realize DR^{*4}/VPP operation services for the effective use of distributed energy resources, for example, verification testing of optimal storage-battery operation

control, which started in August 2018. This time, Osaka Gas is working toward providing new services for the more effective use of renewable energy with consideration given to the possibility of shifting from FIT to FIP in the future.

In its long-term management vision, Daigas Group espouses the concept “Going Forward Beyond Borders 2030,” with the aim of continuing to provide “products and services that go beyond customer expectations” by using state-of-the-art technologies and advanced methods. While further advancing innovation activities, including open innovation and promotion of digitization, Daigas Group will strive to establish new business models useful for people’s lives and business, and also provide relevant services.

*1: Abbreviation of “virtual power plant.” VPPs allow companies called “aggregators” to bundle distributed energy resources and utilize their supply capacities and supply-demand adjustment capabilities.

*2: A sum added to the market price when renewable electricity is purchased

*3: Abbreviation of “feed-in premium.” Under the FIP scheme, renewable electricity is purchased at a price calculated by adding a premium to the market price. Renewable energy companies bear the responsibility for forecasting power generation and the costs caused by imbalance^{*5} due to inaccurate forecasts.

*4: Abbreviation of “demand response,” referring to changes made to electricity demand patterns by owners of distributed energy resources or third parties through the control of the relevant energy resources

*5: The difference between the planned and actual power generation values

[Profiles of Partner Companies]

<Osaka Gas>

Company name	Osaka Gas Co., Ltd.
Home office address	4-1-2 Hiranomachi, Chuo-ku, Osaka
Representative	President: Takehiro Honjo
Capital	132,166.66 million yen
Founded	April 10, 1897
Main business	Production, supply, and sale of gas; generation, supply, and sale of electric power, etc.

<Next Kraftwerke>

Company name	Next Kraftwerke
Home office address	Lichtstraße 43 g, 50825 Köln, Germany

Representative	Co-chief executive officer: Hendrik Sämisch, Jochen Schwill
Founded	2009
Main business	Management of renewable energy, sale of electric power to the supply-demand adjustment market, etc.