Distributed Power Value-Added Service by Ennet

November 7, 2013 Ennet



Contents

1. About Ennet

2. Why is distributed power needed?

2-1 Shift in Social Awareness2-2 Power Supply and Demand Adjustment

3. Ennet Offers a New Service Menu

 Demand Response Service Using CGS
Miyako Smart Community (Local Power Generation and Consumption Model)

About Ennet

Ennet Creates New Value in Energy

Company: Ennet Corporation

ENNET = ENERGY + NETWORK [integration of ENERGY and NETWORK]

- Established: July 7, 2000
- Capital: 6.3 billion yen
- Sales: 163.2 billion yen (FY 2012)

Funded by: NTT Facilities, Inc. (40%)
Tokyo Gas Co., Ltd. (30%)
Osaka Gas Co., Ltd. (30%)



Ennet's Major Supply Sources

Tokyo Gas

800,000 kW

Kawasaki Natural Gas Power Plant

Osaka Gas Himeji Power Plant 46,000 kW



Ennet Maizuru Power Plant 35.000 kW



Ennet Ibaraki Power Plant 21.000 kW



Tokyo Gas Oogishima Power Plant 810,000 kW



large-scale power plants owned by gas companies who fund Ennet, nationwide power plants, and supply from wholesale power suppliers

Use







Tokyo Gas Bay Power Plant 99,000 kW



Esquare Power Plant 96,000 kW



The numbers show the total capacity of each power plant.

Ennet's Renewable Energy



Hirogawa Myojinsan Wind Farm (Osaka Gas) 16 turbines/16,000 kW



Sodegaura Wind Farm (Tokyo Gas) 1,990 kW





Miyazaki Solar Way Power Plant (Miyazaki Solar Way)

1,000 kW



Biomass Power Plant (Eco Energy Japan) 1,250 kW



Matsukawa Hydropower Plant (managed by Nagano prefecture)

1,200 kW

Ennet's Major Customers (as of April 2013)



Ennet's Power Sales

Ennet Ranks Number 10 in Power Sales Ahead of Okinawa Electric Power Co.



New Power Companies Sales Share (2012)



Even 10 years after the electricity market deregulation, new power companies' share is limited to only 2%.



1. About Ennet

2. Why is distributed power needed? 2-1 Shift in Social Awareness 2-2 Power Supply and Demand Adjustment

3. Ennet Offers a New Service Menu

 Demand Response Service Using CGS
Miyako Smart Community (Local Power Generation and Consumption Model)

Shift in Attitudes of a Consumer of Electricity

March 11, 2011 The Great East Japan Earthquake and Tsunami

Shift in attitudes of a consumer of electricity

Before March 11 Energy consumption relying on large-scale

power sources

- 1. Energy saving
- 2. Economy
- 3. CO² reduction

After March 11

Discussion on what a consumer can do

- 1. Power saving
- 2. Business Continuity Plan (BCP)

(power source security improvement)

- 3. Distributed energy
- 4. Renewable energy development

Additionally,

Power demand and supply policy set by the Ministry of Economy, Trade and Industry. For example, "Distributed power deployment" is effective for power consumption control and power demand peak shaving. It is vital for a consumer of electricity to be prepared for "tight power supply" and "power outage when a disaster strikes" in order to ensure continuity of business activities.





For independent power generation, power saving, power security, energy

saving, and CO² reduction

Distributed power development is effective



1. About Ennet

2. Why is distributed power needed?

2-1 Shift in Social Awareness 2-2 Power Supply and Demand Adjustment

3. Ennet Offers a New Service Menu

 Demand Response Service Using CGS
Miyako Smart Community (Local Power Generation and Consumption Model)

Ennet Offers a New Service Menu



Service to provide incentives to customers who increase cogeneration output and reduce risk of service interruptions.



Operations during Power Shortage



Win-Win-Win business model for everybody



Miyako Smart Community (Local Power Generation and Consumption Model 16



♦ Miyako, Iwate Prefecture

■ Area: 1,260 km²

The largest city in lwate Prefecture, the 2nd largest city in Tohoku, and the 8th largest city in Japan.

■ Rich natural resources

Rich in forest, river, and ocean resources. Forests occupy 90% of the area and are particularly rich in forest resources.

■ Population: approx. 58,800

■ Elderly people: 30.2% of population



Benefits to power suppliers

- ensure stable supply (local demand)
- use the fixed rate buyback system
- local government's support (subsidies)

Benefits of local new power generation

- electric power local generation and consumption
- •create local employment
- dividend distribution to local shareholders

Benefits to consumers

- lower electric bill
- ·lower power
- consumption
- negawatt power sales revenue from
- demand response

Miyako Smart Community – Community Energy Management System (CEMS)



Thank you for your participation



For more information on the Web

Ennet



search