Summary of Comments Made at a Press Conference
by Shosuke Mori, FEPC Chairman, on July 18, 2008

This is Shosuke Mori, Chairman of FEPC.

Today, I would like to share my impressions about the G8 Hokkaido Toyako Summit last week. I will then speak about two of the strategies pursued by the electric power industries of Japan for realizing a low-carbon society, namely, the introduction of mega solar power generation and R&D on carbon dioxide capture and storage (CCS).

1. Impressions about the G8 Hokkaido Toyako Summit

While one may evaluate the results of the G8 Hokkaido Toyako Summit in various ways, I have a positive impression that it brought major progress to the international efforts for preventing global warming, which was the main theme of the summit.

Firstly, it was a major step that all G8 countries reached an agreement on the long-term goal of halving global GHG emissions by 2050, thanks to the agreement of the United States in spite of its earlier reluctance based on a strong insistence that such an agreement must be preceded by commitments from countries like China and India.

Even though there are still wide differences in attitudes between advanced countries and emerging countries, this agreement among the G8 countries should lead to the establishment of an international framework among all major countries responsible for GHG emissions.

We were also much encouraged by the G8 Hokkaido Toyako Summit Leaders' Declaration, which evaluated the "sectoral approaches" diligently pursued by Japanese industry as "a particularly useful method" to improve energy efficiency and reduce GHG emissions.

The electric power industry of Japan is committed to supporting a reduction in

global CO_2 emissions by continuing to transfer and spread excellent technologies of Japan to China, India and other countries, particularly in the framework of APP initiatives.

Furthermore, in the Leaders Declaration, the G8 leaders for the first time acknowledged nuclear power as a means for reducing GHG emissions. Since we have long insisted that a low carbon society cannot be realized without nuclear power, this explicit mention of the role of nuclear power in preventing global warming was highly significant.

2. Efforts of the Electric Power Industry of Japan toward the Realization of a Low Carbon Society

To achieve the long-term goal agreed among the G8 leaders at the Hokkaido Toyako Summit, which is to halve global GHG emissions by 2050, it is crucial for all concerned to steadily strengthen the three pillars of nuclear power, energy conservation and renewable energies as emphasized by Prime Minister Fukuda in his speech (“The Fukuda Vision”), and also in the long term to develop innovative technologies that are not simply extensions of presently available technologies.

Since all these tasks are closely related to the electric power industry, we are committed to fulfilling our corresponding responsibilities. Among such efforts of the electric power industry of Japan, I would like to mention today the introduction of mega solar power generation as a zero-emissions source of power and the R&D of carbon dioxide capture and storage (CCS) techniques as an example of innovative technologies.

Introduction of mega solar power generation

Firstly, I will speak about the introduction of mega solar power generation.

In Japan, because of the limited land space and climatic conditions, solar power generation which can be installed on roof-tops is considered to have a higher potential than other natural energy sources such as wind power.

The Fukuda Vision, therefore, presented a very high target for solar power generation: “From the present level, the capacity must be increased 10-fold by 2020 and 40-fold by 2030.” Presently, however, installing a solar power system costs around 2.3 million yen per home, so lowering the cost of solar panels is a major challenge to increasing their use.

The electric power companies of Japan are working hard on plans to build and expand the use of mega-scale solar power plants, because such initiatives will not only allow them to study the impacts of large-scale solar power generation on transmission networks, but may also cause solar panel prices to fall and stimulate public interest.

As announced at the end of last month, the Kansai Electric Power Co., Inc. and Sharp Corporation have decided to build among the world’s largest mega solar power installations with the combined output of 28,000kW at two sites in the coastal area of Sakai City.

This is the first project in Japan to build such large solar power installations to distribute power to factories and households. Through this project, we expect to study how variations in weather and solar radiation impact the stability of power supply networks as a whole and to clarify the challenges in spreading solar power.

By the end of this year, the electric power industry of Japan intends to jointly formulate a specific plan for introducing mega-scale solar power generation with such details as capacities and timings, based on the prospects for support from the national and local governments and the future trend of solar panel prices.

Also by the end of this year, the electric power industry of Japan intends to draw up a support plan for expanding the use of electric vehicles that do not emit any CO_2 while being driven, with such details as the electric power industry’s plan for using such vehicles.

R&D on CCS

The electric power industry has been conducting R&D on CCS for about 20 years, namely, techniques for capturing CO_2 from power plants and storing it underground.

In 1990, the Kansai Electric Power Co., Inc. became the first electric power company to start research on CO_2 separation and capturing techniques, and in the following year, built a pilot plant for capturing CO_2 at the Nanko Power Plant in Osaka City, and conducted R&D on the world's most efficient CO_2 absorber.

Moreover, the techniques for injecting captured CO_2 into a deep underground coal seam and immobilizing it there have been studied at Yubari City, Hokkaido, since FY2002.

On the basis of such R&D activities, the 10 electric power companies of Japan and J-POWER decided to fund and participate in the running of Japan CCS Co., Ltd. (established May 2008), and established a unified organizational framework in Japan for conducting research in preparation of major CCS demonstration projects.

This research company has already responded to a public offering by NEDO for undertaking a feasibility study for innovative zero-emissions coal gasification generation projects. If chosen, the company will study the economy and efficiency of the overall system for all operations from the separation and capturing of CO_2 from coal gasification power generation plants to the transport and storage of the captured CO_2.

The G8 Hokkaido Toyako Summit Leaders Declaration states: "We strongly support the launching of 20 large-scale CCS demonstration projects globally by 2010." Thus, the G8 leaders acknowledge that CCS is an innovative technology that may greatly reduce global CO_2 emissions.

However, according to some estimates, the capture and storage of a single ton of CO_2 may cost 7,000 yen or even more. There are also many other challenges to overcome, such as verifying the safety and stability of CO_2 storage.

The electric power companies of Japan will continue their R&D activities, and by participating in the running of Japan CCS Co., Ltd., for example, will play an active role in overcoming these challenges.