## Summary of Comments Made at a Press Conference by Shosuke Mori, FEPC Chairman, on July 17, 2009

Today I would like to say a few words about three topics, which are "Peer Review Activities under the Asia-Pacific Partnership on Clean Development and Climate (APP) in South Korea," "Japan's policy measures for promoting and enhancing nuclear power generation," and "Events during Thermal Storage Month."

1. Peer Review Activities under the Asia-Pacific Partnership on Clean Development and Climate (APP) in South Korea

First, I would like to report on peer review activities under the Asia-Pacific Partnership on Clean Development and Climate (APP), which took place from July 6 to 10 in South Korea.

APP, as I have previously mentioned, was set up in January 2006 to focus on the public-private cooperative efforts of seven countries in the Asia-Pacific region to address the challenges facing this region, such as ever-increasing energy demand, energy security, and climate change issues.

At present, eight task forces are active; one of them, the Power Generation and Transmission Task Force, is engaged in peer review activities in which engineers of member countries visit coal-fired thermal power plants reciprocally, propose measures to improve operation and maintenance activities aiming to maintain and enhance thermal efficiency.

Over the years peer review activities have been successfully undertaken in four countries: Japan, India, the United States, and Australia.

This time peer review activities were conducted at the Yonghung Thermal Power Plant on the outskirts of Seoul, attended by about 100 participants, the largest ever.

Unit 1 was chosen as a model plant and three groups of reviewers examined possible corrective measures from technical aspects, such as optimizing boiler combustion condition and improving steam turbine efficiency.

The review found that the possible corrective measures to the unit would improve thermal efficiency by approximately 0.6% and reduce carbon dioxide emissions by about 58,000 tons annually.

The colleague of South Korea greatly appreciated these results and also other participating countries highly evaluated the review, with comments such as "The peer reviews are improving dramatically each time and we hope this activity will progress further."

Coal-fired thermal power generation now accounts for about 40 percent of the world's electricity output. Even in Germany and the United States, which are considered environmentally-advanced countries, coal-fired plants generate 50 percent of the entire power, whereas they account for 80 percent of the power output in China.

However, compared with Japan, which has long been committed to improving thermal efficiency and cautious operation management, these countries have lower power generation efficiency, for instance about 10 percents lower in China and India than in Japan.

Although APP's activities may look quite inconspicuous, the transfer of Japan's best practices to those countries which operate numerous inefficient coal-fired thermal power plants would potentially reduce CO2 emissions to a large extent without needing to develop new technologies.

According to some estimates, enhancing the efficiency of coal-fired thermal power plants in the United States, China and India to the level similar to Japan would reduce carbon dioxide emissions by nearly 1.3 billion tons per annum, equivalent to Japan's total annual CO2 emissions.

In keeping with the 2009 G8 Summit, held one week ago, the Major Economies Forum (MEF), which is composed of major industrialized countries plus emerging economies like China and India, took place and agreed to establish a Global Partnership to promote the transfer of low-carbon technologies and help arrest global warming.

The electric power industry intends to continue effectively using the APP framework which encompasses the United States, China, India and other major carbon dioxide emitters that are not parties to the Kyoto Protocol, to provide active support for technology transfer to member nations and their capacity-building activities, and to broadly provide information both in Japan and abroad regarding the effectiveness of the sectoral approach in the power sector.

2. Japan's Policy Measures for Promoting and Enhancing Nuclear Power Generation

I would now like to talk about Japan's policy measures for promoting and enhancing nuclear power generation, which were formulated by the Nuclear Energy Subcommittee of the Advisory Committee for Natural Resources and Energy on June 18 this year.

Japanese Prime Minister Taro Aso, in his announcement of the med-term goals for the reduction of GHG emissions a month earlier, stated his intention of "making utmost effort to develop and spread nuclear power" on the long-term path toward creating a low carbon society.

The announcement was particularly timely, and we greatly appreciate that coinciding with the formulation of the med-term goals, the Japanese government drew up policy measures for promoting and enhancing nuclear power generation on the understanding that "it is practically impossible to address the global warming issue, as well as a steady supply of energy, without using nuclear power generation."

The description at the beginning of the policy measure statement that "The government will take the initial step in this effort," is particularly encouraging for us.

The electric power industry will do its utmost to improve the operation rate of nuclear power plants, establish a closed nuclear fuel cycle on the safety first principle and with strong central government leadership, steadily carry out projects to construct new nuclear power plants, and attain the goal of increasing the share of non-fossil energy sources, including nuclear power, to 50% by fiscal 2020.

Incidentally, it is interesting to note that Aomori Prefectural Governor Shingo Mimura visited the FEPC today, requesting us to "carry out the revised pluthermal program steadily."

We informed him of the steady progress being made in pluthermal programs as three electric power companies – Chubu Electric Power, Shikoku Electric Power and Kyushu Electric Power – had completed the transport of MOX fuel and are expected to carry out their pluthermal programs shortly, while other power companies have concluded a fuel fabrication contract with manufacturers or submitted proposals for pluthermal programs to host municipalities.

We also promised him to make industry-wide efforts to attaining a new goal of carrying out pluthermal programs at 16 to 18 nuclear reactors across the country by fiscal 2015, since establishing a nuclear fuel cycle is essential for Japan, which lacks energy resources, to continuously ensure a steady supply of energy for many years to come.

## 3. Events during Thermal Storage Month

Finally, I would like to remind you that July, during which electric power demand peaks, is designated as Thermal Storage Month.

A heat pump that pumps thermal energy from the environment and uses it for heating, hot water supply and so on was designated as "a renewable energy source" by the Japanese government in April this year.

According to some estimates, replacing all air-conditioning and hot water supply units in the residential/commercial sector and heating and drying processes etc. in the industrial sector with heat pumps would reduce Japan's CO2 emissions by as much as 130 million tons per annum, equivalent to 10 percent of her total  $\overline{\sigma}$  CO2 emissions.

We hope that the recent recognition of the heat pump, a key solution on the demand side of electric power to fight the global warming crisis, as a renewable energy source will provide momentum for increasing the use of heat pumps.

In one of the events during this year's Thermal Storage Month, we will hold an Energy Solution & Thermal Storage Fair 2009 at Tokyo Big Site from July 29 to 31. At this fair we will exhibit high-efficiency equipment and systems which utilize heat pump technology. We hope you will visit the fair.

Thank you for your kind attention.