Summary of Comments Made at a Press Conference
by Shosuke Mori, FEPC Chairman, on May 22, 2009

Today I would like to speak on three topics: (1) the electric power industry's opinions about Japan's mid-term goal for the reduction of GHG emissions; (2) assessment of the possible impacts on power systems of large-scale introduction of photovoltaics; and (3) economic trends as seen from the electricity demand in April.

1. Electric Power Industry's Opinions about Japan's Mid-Term Goal for the Reduction of GHG Emissions

Firstly, I would like to speak on Japan's mid-term goal for the reduction of GHG emissions.
As you know, Prime Minister Aso is going to select one from six proposals on Japan's mid-term goal for the reduction of GHG emissions. The decision will be based, for example, on the results of town meetings and the arguments raised from public comments.
This is going to be a very significant choice because it will have a major impact on people's welfare and corporate activities in Japan over the next decade and beyond.

Of the six proposals, which would be the most reasonable and suitable choice for Japan? The electric power industry of Japan reviewed each of the six proposals from the following three perspectives: fairness and equality among different countries; feasibility in terms of technology and economy; and the level of burden acceptable to the public. We also considered ensuring a stable supply of energy to be another indispensable standpoint.

Regarding fairness and equality among different countries, it is reasonable to evaluate each country's goal by the degree of efforts that the country will need to make to achieve further reduction of GHG emissions, namely, in terms of the additional cost per ton of GHG emissions reduced.

Japan and a few other countries have long been developing and introducing

energy-efficient appliances, and have promoted low carbon power sources by expanding the use of nuclear power, etc. In contrast, some Western countries, for example, are lagging behind in energy saving efforts. When a country like Japan has to make further progress in GHG reduction, such efforts are bound to cost more than for the countries that have not already worked hard to conserve energy.

When we compare GHG emissions reduction goals among different countries, we need to factor in the different situations in different countries. If anyone criticizes Japan for its apparently modest GHG emissions reduction goal, we should assert with pride that it is because the whole country has already been making great efforts over a long time with strong awareness of the global environment, and has already achieved the world's leading energy efficiency.

Furthermore, concerning international negotiations, the Japanese government should demand a fair evaluation of the contributions the country has been making by providing energy-efficient appliances and technologies to the world, thus improving the efficiency of energy utilization on a global scale.

Regarding the level of burden acceptable to the public, the final judgment should be left to the public. However, according to the preliminary calculation by government's committee to set med-term goal, even setting a GHG emissions reduction goal according to the third proposal, namely, a 14% reduction from the 2005 level (7% reduction from the 1990 level) would incur an annual financial burden of 60,000 to 180,000 yen per household in the form of less disposable income, higher lighting and fuel expenses, etc.

Is the public really willing to accept such a heavy burden? We doubt it.

Finally, the electric power industry of Japan is most concerned about compatibility with the need to ensure a stable supply of electricity.

As I have mentioned in earlier press conferences, the year 2020, the target year for the mid-term goal, is just around the corner for us, the electric power companies of Japan, because it typically takes 10 to 20 years to complete a project for building plants and infrastructure.

Some of the six proposals assume that electricity demand will grow significantly more slowly than in the past. When evaluating these proposals, we must be fully aware of the threats to supply stability, particularly if progress in energy saving turns out to be slower than expected.

By FY2020, the electric power industry of Japan aims to attain, on the supply side, a 50% share of non-fossil power in the generation mix, and on the demand side, improved energy efficiency throughout whole society by expanding the use of Eco-Cute water heaters and electric vehicles, for example. Moreover, regarding international cooperation, we are committed to actively promoting decarbonization in the world with power technologies developed in Japan. However, considering all the perspectives of fairness and equality among countries, feasibility, and compatibility with supply stability, we believe that the first of the six proposals is the most reasonable and suitable choice for Japan.

We sincerely hope that Prime Minister Aso will make a sound decision.

2. Assessment of the Possible Impact on Power Systems of Large-scale Introduction of Photovoltaics

Next, I would like to speak on our project for assessing the possible impact on power systems of the large-scale introduction of photovoltaics in future.

Electric power companies perpetually adjust the operation of thermal and hydro power plants according to constant fluctuations in electricity demand throughout the year, ensuring that the frequency and other power quality parameters remain the same.

The Japanese government has announced a plan for the large-scale introduction of photovoltaics in the future. However, the massive interconnection of photovoltaics, the output of which may change instantly with the level of solar radiation, could make our power supply unstable. Combined with usual fluctuations in electricity demand, we would then face much greater and more complex challenges in controlling the supply-demand balance.

If we ever fail to maintain the supply-demand balance, it will greatly disturb the system frequency, which has various effects on enterprises' production activities and people's lives by causing defective products, shutdown of electrical appliances, etc.

Therefore, the most advanced technologies must be developed for accurately estimating and optimally controlling fluctuations in the output from massive photovoltaic installations. However, we do not yet have sufficient knowledge and data to prepare for the development of such technologies.

Thus, the electric power industry of Japan has decided to apply for a government-sponsored project to promote large-scale introduction of distributed renewable energy sources and to ensure the stability of power systems, and we plan to study its potential impact on power systems.

Specifically, we plan to install solar radiation recorders and thermometers at about 320 locations around Japan, and synchronize them second by second for collecting data. In addition, we plan to install photovoltaics at 111 of these chosen locations (total installed capacity of about 1,500kW) and measure outputs from them.

The output from a single photovoltaic installation tends to fluctuate greatly with weather, but the combined output from multiple photovoltaic installations fluctuates less thanks to the smoothing effect. In the proposed experiment, we intend to collect and analyze data on this effect as well.

The project will last three years from FY2009. The interim review is planned for the second half of FY2010, while the final review is planned for the first half of FY2012.

3. Economic Trends as Seen from the Electricity Demand in April

Finally, I would like to comment briefly about a bulletin on the electricity demand in April, which we compiled just today.

The total large industrial demand of the 10 electric power companies of Japan in April fell from the same month of the previous year by 20.5%. The severity of the fall has lessened for two consecutive months (the electricity supply in March was 24.4% down from the previous year).

The Industrial Production Index for March reported (confirmed) on May 19 showed a 1.6% improvement from the previous month. So, there is a sign that the economic depression has already bottomed out, at least in certain sectors.

However, the level of fall from the previous year in electricity supply to large industrial customers still exceeds 20%, so we will need to keep observing the trend carefully.

This is all for today. Thank you for your kind attention.