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A Review of 2011 Japanese and Overseas Energy Situation

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Only five days are left before the year 2011 ends. While the energy situation has always been prone to grave problems and turbulences, I think that this year was one of the more particularly turbulent ones to occur during my life with regard to the global energy situation. I would like to review this year's Japanese and overseas energy situation while discussing seven major topics.

First, the March 11 Great East Japan Earthquake with its accompanying devastating tsunami waves seriously affected Japan's energy system. The unprecedented disaster has left nearly 20,000 people dead or missing and has wreaked serious, wide-ranging damage on Japan's oil, gas and electricity supply chains. While the energy industry's all-out restoration efforts have recovered a peacetime mode for oil and gas supply, we still remember that the disaster greatly shook Japan's stable energy supply.

Second, I must take up the Fukushima Daiichi nuclear plant accident. Crippled by the quake and tsunami, the plant lost all electricity sources for core-cooling functions, allowing core meltdowns and hydrogen explosions to occur and release massive radioactive substances. The serious accident was rated 7 on the INES (International Nuclear and Radiological Event Scale) scale of 7. Relevant parties' hard efforts allowed the government to declare the completion of the "Step 2" operations to achieve the situation of cool shutdown and stabilization of the nuclear plant on December 16. Given a mountain of future problems including the decommissioning of the reactors, decontamination, and evacuees' return, the path to the true solution to and stabilization of the crisis is still seen as long and rugged. That the grave nuclear plant accident directly caused the following key topics is of importance.

Third, the disaster affected many major fossil thermal power plants as well as nuclear plants, resulting in a large power generation capacity loss and electricity shortages. Summer electricity supply and demand measures became Japan's urgent challenge. The government, electricity utilities, industries and households implemented all-out electricity saving efforts mainly in the Kanto and Tohoku regions. In this respect, the government invoked an electricity consumption restriction order for the first time in 37 years since 1974 following the first oil crisis. The summer of 2011 impressed us with electricity saving measures. While electricity-saving efforts were promoted, power utilities developed alternative electricity sources, boosting their LNG and oil procurement. Japan's LNG imports from April to October 2011 increased by about 7 million tons or 17% from a year earlier. Coupled with price hikes, the quantitative LNG import rise led to a substantial increase in import payments (greater costs and wealth outflow). While the electricity supply-demand balance has remained tight, nuclear reactors under regular checkups have remained unable to restart operation. Japan's nuclear power generation has declined as time has passed. This is also a major event for 2011. As of December 26, only six out of Japan's 54 nuclear reactors were in operation.

Fourth, the government has begun to thoroughly reconsider its energy policy in response to the disaster and the subsequent nuclear plant accident. The June 2010 Cabinet approval on the Basic Energy Plan sought to promote nuclear power generation (through the construction of 14 nuclear reactors and the elevation of the capacity utilization ratio up to 90%) to help achieve three Es – energy security, environmental protection and economic efficiency – simultaneously. The Fukushima nuclear plant accident has naturally forced the government to thoroughly reconsider the Plan. Policy reconsideration discussions have been going on at the Energy and Environment Council of the Cabinet Office and the Fundamental Energy Problems Committee of the Ministry of Economy, Trade and Industry. At present, it is difficult to anticipate the future direction of these discussions. Participants in the policy discussions are wide apart, while the discussions cover all major energy issues including the best energy mix and electricity system reforms. Nothing definite can be anticipated until the government panels conclude energy policy discussions around next summer.

In the year when the above challenges emerged in Japan, which depends on imports for almost all of its energy supply, the international energy situation for the country changed dramatically. The fifth topic I cite here in this respect is the destabilization of the Middle East and North Africa situation that represents the emergence, development and deepening of the so-called "Arab Spring" movements. Particularly, the Libyan civil war disrupted the supply of high-quality Libyan crude oil, making the greatest contribution to boosting a crude oil price spike in the first half of 2011. In countries where the government changed on "Arab Spring" movements, a mountain of problems exists toward their stabilization. As the Syrian situation has grown more serious, the local destabilization has continued. Given structural social, political and economic problems behind the "Arab Spring" movements, the situation is complicated and serious. We may have to keep close watch on future developments including the movements' impact on major oil producing countries. The Middle East situation also saw tensions growing toward the yearend over Iran. U.S. Congress passed legislation to effectively impose an embargo on Iranian oil exports. The rising regional tensions over Iran shook international energy markets in late 2011.

The sixth topic is the escalation of the European economic crisis. A debt crisis and growing default fears in Greece and their spillovers to Italy and other major European countries worked to emphasize serious problems facing the eurozone economy, leading to speculations about the possible breakup of the eurozone. The European Union repeated summit meetings, managing to produce some agreement and contain the crisis during 2011. But the problems have been left unsolved. Market fears are still lingering over the downgrade of sovereign debt ratings for major countries and government securities redemptions. Depending on future developments, the European economic crisis may exert huge impacts on the world economy including energy demand. In this sense, the fate of the European crisis will attract attention.

Seventh, the year saw a lack of global governance to appropriately address increasing global challenges. In the United States, EU, China and Russia, leaders were busy dealing with domestic problems such as the current economic crisis as well as presidential elections and leadership replacements in 2012, tending to look inward. The situation has led to frequent conflicts of national interests. Amid recession fears and geopolitical risks, the lack of global governance could become a great problem regarding the stability of the world in the face of unforeseeable developments. Among such developments was the December 17 announcement of North Korean

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leader Kim Jong II's death that was reported throughout the world. Since North Korea's future moves will have a great bearing on the stability of Northeast Asia, the development was taken as symbolizing the end of the tumultuous year.

The above topics are important not only for the review of 2011 but also for the outlook for 2012. We may have to closely watch future developments involving these topics.

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