

2012 New Year's Address
January 10, 2012
Japan Atomic Energy Commission

On the occasion of the first Commissioners meeting in the year 2012, the Japan Atomic Energy Commission would like to present its policies and activities for this year.

On March 11, 2011, the Fukushima Dai-ichi Nuclear Power Plant of Tokyo Electric Power Co., Inc. (TEPCO) was hit by the Tohoku-Pacific Ocean Earthquake. The operating units there achieved shutdown automatically but lost all electric powers and ultimate heat sinks due to the flooding of the reactor buildings caused by the huge tsunami triggered by the earthquake. Accordingly they were led to meltdown of reactor cores and hydrogen explosions in the reactor buildings, resulting in the release of large amounts of radioactive materials into the air. Widespread environmental contamination forced residents in nearby areas to evacuate and many of these people are, even today, unable to return to their hometowns; with their communities disrupted, their daily lives have become difficult and inconvenient. In addition, shipments of commercial goods produced in these regions have been restricted, and increased radioactive levels in living areas have forced many parents to worry about the health of their children. The Commission would like to express its great regret and remorse for the occurrence of such situation as it is responsible for planning, examining, and determining policies on the research, development, and uses of atomic energy for securing energy resources for the future, advancing science and technology, promoting industry and thereby contributing to the improvement of the welfare of mankind and national living standards, under the principle of restricting it to peaceful purposes, ensuring safety and operating democratically and autonomously.

As the New Year begins, the Commission once again urges the government and the TEPCO to do their utmost to support those affected by the nuclear accident, to restore communities contaminated by radioactive materials, and to work toward decommissioning the disabled reactors. More specifically, efforts should be focused on a detailed study of the degree and status of the contamination in the contaminated areas, remediation of the contaminated land to a tolerable condition for people to engage in their daily lives and commercial activities, while considering the various circumstances and demands of residents including suitable management of contaminated materials

recovered. Nuclear-related institutions with expertise on radiation safety should cooperate fully with the affected municipalities to ensure the safety of residents, including supporting their remediation activities technologically, offering information on radiation and promoting risk communication with them. In implementing these efforts, it is important for them to be together with the communities and talk about things that matter most to the communities, paying careful attention to their feeling and requirements. At the same time, it is important for the government to take every effective measures for health care of residents in contaminated areas and for radiological protection based on the evaluation of exposure level due to various pathways.

In order to decommission the disabled reactors at the Fukushima Dai-ichi NPS, it is necessary to promote the management of a large amount of both radioactive water in the reactor buildings and debris generated by tsunamis and explosions, transfer of spent fuel, and removal of damaged fuel. Recognizing the responsibility to complete these tasks that require significant amount of expense and time with safety first, the government should supervise and give guidance to TEPCO in proceeding with such tasks safely and rightly while maintaining transparency to the community. For difficult tasks that require innovative approaches, the government should prioritize research, development, and demonstration of enabling technologies by calling expertise both at home and abroad together.

In parallel with these efforts, this Commission calls on the government and all parties involved in the nuclear business to examine the occurrence and the consequence of this accident and, in striving to continue the use of nuclear energy in future, to promote effective risk reduction activities that reflect the results of the examination, while always bearing in mind the responsibility to lead the use of nuclear energy to the improvement of the living standard of Japanese citizens.

First of all, as it was revealed by the accident that "defense in depth" features realized in existing NPPs were insufficient, the parties involved should implement the emergency safety measures requested by the government for preventing the occurrence of severe accidents from the attack of beyond design-basis tsunamis, and carefully examine the appropriateness of the safety margin thus realized from the viewpoint of the required reduction of tsunami risk from stress-test perspectives. It is also important for them to explain the result to the public clearly and carefully.

Second, considering the root cause of the existence of insufficient defense-in-depth features and the resultant occurrence of such devastating events was the inadequacy of safety regulations to pay full attention to every relevant information and experiences and reflect them in the regulation for the assurance of a low risk of nuclear facilities, the Commission believes it necessary to establish a nuclear regulatory body that has sufficient independence, competence, and transparency; it should also pursue continuous improvements in safety in accordance with the fundamental principle that resources should be applied and focused where they are necessary on the basis of safety significance and risks. Similarly, it is also critical for the government to identify issues concerning nuclear security revealed by the accident and take suitable actions promptly for the improvement of the situation. At the same time, it seems necessary to review the adequacy of the current nuclear energy liability insurance system in accordance with the international situation.

Furthermore the parties involved in the nuclear business should continue to quickly provide accurate information on the accident at the Fukushima plant to the international communities, keenly recognizing that to do so is the responsibility of Japan.

The Commission considers that changes are necessary in nuclear power business to ensure its trustworthiness as an essential part of energy mix through integrated risk management that places strong focus on public safety, being conscious that the Government intends to reduce dependency on nuclear power generation in the future energy supply-mix that should satisfy the target of achieving safety, economics, environmental suitability and energy security. The Commission needs to decide on measures to materialize the world's safest nuclear facilities and policies to deal with reprocessing, interim storage of spent fuel, and the management and final disposal of radioactive waste. At the same time, it is also important for Japan to stay on the cutting edge in international cooperation, and in assurance and enhancement of nuclear safety, nuclear security, and nuclear nonproliferation in the international communities. This is enabled by such activities as research and development of innovative nuclear energy technologies, including fast reactors, high temperature gas reactors, nuclear fusion, as well as those of radiation technologies beneficial to improved living standards. Last but not least, we must raise also other basic scientific technologies, human resource development, and measures to deal with an increasing number of countries wishing to benefit from nuclear science and technology. In formulating the new framework

document for nuclear energy policies this year, the Commission is determined to work with the public, bearing in mind that public trust is essential in determining meaningful national policies on the uses of nuclear energy.