New Year's Statement

January 10, 2006
Atomic Energy Commission of Japan

Happy New Year, everybody. Thank you sincerely for your continued understanding and cooperation for the activities of the Atomic Energy Commission of Japan (AEC). We would like to take this opportunity to deliver our New Year's Statement for the year 2006.

This year, the AEC enters its 51st year since its foundation. At present in Japan, in the field of utilization of radiation, research reactors, accelerators, and facilities for generation and utilization of radiation for radioactive isotopes etc. are being developed, and these devices and facilities are being used in academic research, medicine, and industries such as agriculture and manufacturing. Meanwhile, as for nuclear power generation, 54 nuclear reactors with total capacity of approximately 49,000 MW supply about 35% of Japan's total generated electricity, increasing Japan's self-sufficiency rate of energy from 4% to 19%. Utilization of nuclear power instead of natural gas thermal power would reduce annual emission of carbon dioxide, the cause of global warming, by approximately 150 million tons. We have been overcoming troubles and making steady progress in the nuclear fuel cycle activities for nuclear power generation including uranium enrichment, reprocessing of spent nuclear fuel etc. as well as in management and disposal activities for radioactive waste. Furthermore, we have been advancing with research and development toward the practical application of next generation nuclear power generation technologies including fast breeder reactors, and research and development of new radiation sources and their application technologies, hydrogen production technologies using heat from nuclear reactors and nuclear fusion energy technologies.

To ensure the sound development of the market economy, it is necessary for the Government of Japan to implement human resource, technological development, and other infrastructure development as the necessary basis/foundation for the realization of the shared vision of the people. In October last year, the AEC formulated the Framework for Nuclear Energy Policy following deliberations for over one year, based on multiple opinions gathered from the people. The Framework maps out the basic

concepts of nuclear energy policy, including development of the necessary infrastructure for realizing the vision of contributing to promotion of science and industry and thus to the improvement of the welfare of society through the research, development, and utilization of nuclear energy. The AEC expects that the relevant ministries and agencies will promote such infrastructure development based on the Framework, and that research and development institutions and private sector organizations will each have the spirit to promote activities to make maximum use of such infrastructure, based on the basic concepts of the Framework. In the New Year, while placing emphasis on the following points, the AEC will follow up these efforts and evaluate them, from the perspective of checking the appropriateness of the formulated policy.

The AEC acknowledges that, while some members of the public evaluate nuclear power plant technology highly as an energy technology that should be utilized in the future too, those who do not agree with that evaluation are not few in number. The main reasons for that are thought to be concerns that radiation accidents caused by human error, aging of facilities etc. might occur, and the existence of radioactive waste for which final disposal activities have not been implemented.

Consequently, the AEC believes that it is necessary for the administrative organizations for nuclear safety regulation to explain timely and appropriately to the public the details of risk evaluation activities and safety regulation activities of nuclear facilities. Meanwhile, we expect operating entities to comply with the authorization requirements of projects and implement high quality activities to ensure the necessary and sufficient level of safety. Furthermore, efforts for the future always contain uncertainties, but since projects relating to the utilization of nuclear energy promote the public interest, the government and operating entities are required to appropriately manage risks relating to those uncertainties through the PDCA (plan-do-check-act) cycle, and to ensure the stable operation of those projects to secure the trust of the people. In advancing these activities, operating entities are expected to commit to make workplaces attractive by encouraging originality and creativity in continuously seeking the improvement of the means to achieve safety standards on the spot.

Japan is aiming to become a sound material-cycle society. Consequently, it is important to pursue the policy of “reduce, reuse, and recycle” appropriate for the society in nuclear power generation activities too, and it is appropriate from that perspective to promote recycling of nuclear fuel by operating entities. However, the implementation of

the recycling does not mean that radioactive waste that should be disposed of will not be generated in line with promotion of nuclear power generation activities including activities for recycling of nuclear fuel and utilization of radiation. Therefore the AEC believes that, at present, (1) it is particularly important to steadily advance the work of finding locations for disposal of high-level radioactive waste; (2) concerned parties should develop the safety standards; (3) activities should be advanced to promote mutual understanding with the public that the disposal can be implemented safely; and (4) technical and systematic examination should be further pursued regarding the desirable method of disposal of long lived radioactive waste with insignificant heat generation.

In order for radiation to be utilized more deeply and broadly in the future while ensuring its safety, further research and development of radioactive sources and their application technologies, industry-university-government collaboration, securing of human resources to lead in such utilization, and activities to share with the public an accurate understanding of the advantages and disadvantages of such technologies will be important. The AEC calls on the people in charge of the actual practice of research and development institutions, educational institutions, and utilization of radiation to further develop such activities. At the same time, the AEC will examine scientific knowledge and trends in Japan and overseas about food irradiation, and so forth.

In Japan at present, as part of economic structural reform, reform is being advanced of the relationship between the state and local governments. Consequently, in the field of regional development too, the concept is being introduced that each region mobilizes resources and makes competing efforts for promotion of regional revitalization in the aim of achieving sustainable development. This concept could be considered to be perfectly natural, since we are witnessing the advent of a highly competitive society in line with globalization of economy. However, based on the decision-making structure in local government at present, it is necessary for a local government that provides the location for a nuclear facility and strives to contribute to the public interest of stable supply of energy and measures against global warming, to incorporate its own vision with the visions of the prefecture where it locates and its surrounding areas through dialogues. If joint decisions that pursue co-existence and co-prosperity by making use of the location of the nuclear facility are not fostered within and outside the local government by this means, it can be considered that there is a risk that division and confrontation will occur. We believe that attention should also be paid to this point in

terms of ensuring mutual understanding among the national government, local governments, and operating entities, the importance of which is stressed in the Framework for Nuclear Energy Policy.

Joint international actions and bilateral or multilateral cooperation activities, which are beneficial for the accomplishment of the objectives of research, development and utilization of nuclear energy, such as the ITER project and development of Generation IV Nuclear Reactors, should be strongly promoted in the future, not only from the perspective of pursuit of synergy effects, economic viability and diversification of risk in Japan's nuclear energy research and development activities, but also from that of the mutual benefit of strengthening of the functioning of the international community. Meanwhile, it is also important to cooperate with the promotion of peaceful utilization of nuclear energy in the international community, particularly developing countries. Furthermore, Japan should actively participate in discussions and approaches for maintenance and strengthening of the validity of the international nonproliferation regime, which is the prerequisite for the peaceful utilization of nuclear energy, from the perspective of making it effective and efficient.

While listening to the opinions of broad and diverse sectors of society including experts, the general public, local governments, policy proposal groups etc., the AEC, jointly with the relevant administrative agencies, will implement evaluation of policies relating to research, development and utilization of nuclear energy, and through these activities, will implement "public hearing and publicity activities" for promoting mutual understanding with citizens regarding nuclear energy.

This year, too, the AEC will make the utmost effort so that the research, development and utilization of nuclear energy is managed in such a way that the probability of manifestation of the negative aspect of nuclear energy is sufficiently reduced, while at the same time, its benefits are enjoyed to the maximum. We sincerely ask for your support and cooperation again this year, including your appropriate criticism and suggestions.