Abstract

To be able to respond to the rapidly increasing demand for electricity, a number of emerging countries in East Asia intend to proactively introduce and expand nuclear power generation in the future. However, if any significant accident were to occur at a nuclear power plant, it would not only affect that particular country but also cause widespread damage in other East Asian countries and raise concerns over nuclear safety and radioactive hazards.

It is, therefore, necessary to review the nuclear security and nuclear safety management measures and to establish a shared awareness, taking into account the energy situations, infrastructure, technological levels, and other circumstances of emerging countries in East Asia.

Based on these goals, this research focuses on emerging countries in East Asia that are planning to expand nuclear power generation or are considering the possibility of introducing nuclear power for their use. This research compares the present situations in these countries with regard to safety regulation and nuclear security systems to identify problems in a shared effort to establish an information-sharing system for accidents and to put in place a desirable cross-border cooperation. Toward this end, the working group members aim to achieve the 3Ss—to enhance nuclear Safety standards and nuclear Security, and to establish nuclear non-proliferation Safeguards in East Asia—and thereby promote the use of nuclear energy on a scale appropriate to the increase in energy demand in this region.

In this paper, the member countries in this working group—China, Indonesia, Japan, Malaysia, Philippines, Republic of Korea, Singapore, Thailand, and Viet Nam—will share information on their present nuclear safety standards, discuss how these safety standards should be reviewed in light of the accident in Fukushima, and how these should be applied based on current status reports by each country, and recommend how to establish a shared awareness throughout East Asia.