

Key Points of Outlook for 2010

Prospects for Nuclear Power Generation in the World and in Japan

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While major countries in the world made progress in sharing recognitions of the global warming prevention and the energy security in 2009, there were no remarkable changes to their respective nuclear energy policies. While China, India, South Korea and other Asian emerging countries promoted aggressive nuclear energy development policies, Western countries made no epoch-making policy change and maintained their traditional policies. The United States fell short of enhancing its nuclear energy policy. Loan guarantees as the key to assistance for new nuclear plant construction plans have not been implemented after four final candidate plans for such guarantees were selected though in 2010 it might be expanded by 3 times. Among European nations, Britain offered milestones for constructing new nuclear plants in 2 years ago and a slight progress in 2009. Italy took legislative actions to introduce new nuclear plants around 2020 but any concrete planning has not made yet. Sweden released a long-term energy policy outlook including new nuclear plant construction as one option early in 2009 but no more progress since then. Germany was expected to make a nuclear policy change after September's general election but any actions have not been taken yet. In summary, one of these countries made major progress toward building nuclear plants. For private sector firms as nuclear power development leaders, wind power generation, smart grids and other programs emerged as key investment targets, while no new incentives emerged to motivate them to use more business resources for nuclear energy development.

Nuclear power generation should be required to play an even greater role in promoting greenhouse gas emission cuts in the power generation sector. China has been implementing new nuclear plant construction plans one after another and is expected to become the world's second largest nuclear power generator after the United States in 2030. India as well has been promoting aggressive plans to expand nuclear power generation. Middle Eastern and Southeast Asian countries are promoting domestic preparations and international cooperation measures in a bid to introduce new nuclear plants around 2020. France, Russia and South Korea have stepped up public and private sector efforts to assist and cooperate with these countries in nuclear development. Under such situation, the Japanese government has just launched specific measures to assist private sector companies in participating in overseas nuclear projects and the further detailed actions are attracting

attention.

In Japan, Kashiwazaki-Kariwa nuclear power station started commercial operations of the unit No. 6 and 7 among its seven reactors suspended since the 2007 earthquake. Over recent years, the capacity utility factor of Japanese nuclear power plants has remained far below the global average. This year, utilities, regulators and relevant local governments are required to cooperate in promoting utilization of nuclear plants. Other matters subject to close attention in 2010 include progress in the construction of the new nuclear plants in Oma and Shimane under construction, test operations of a spent fuel reprocessing plant by Japan Nuclear Fuel Ltd. in Rokkasho Village toward commercial operations beginning in October 2010, the promotion of new centrifuge development for uranium enrichment, and further progress in the utilization of mixed oxide fuel in existing LWRs.

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