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RECENT ACTIVITIES OF THE SAFETY AND OPERATION PROJECT OF THE SODIUM-COOLED FAST REACTOR IN THE GENERATION IV INTERNATIONAL FORUM

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The Generation IV (GEN-IV) international forum is a framework for international cooperation in research and development (R&D) for the next generation of nuclear energy systems. Concerning the sodium-cooled fast reactor (SFR) system, there are five cooperation projects for R&D. The SFR Safety and Operation (SO) project addresses the area of the safety technology and the reactor operation technology developments. The aim of the SO project includes (1) analyses and experiments that support establishing safety approaches and validating performance of specific safety features, (2) development and verification of computational tools and validation of models employed in safety assessment and facility licensing, and (3) acquisition of reactor operation technology, as determined largely from experience and testing in operating SFR plants. The tasks in the SO topics are categorized into the following three work packages (WP): WP-SO-1 "Methods, Models and codes" is devoted to the development of tools for the evaluation of safety, WP-SO-2 "Experimental Programs and Operational Experiences" includes the operation, maintenance and testing experiences in experimental facilities and SFRs (e.g., Monju, Phenix, BN-600 and CEFR), and WP-SO-3 "Studies of Innovative Design and Safety Systems" relates to safety technologies for GEN-IV reactors such as active and passive safety systems and other specific design features.

In this paper, recent activities in the SO project are described.

Country/Int. Organization

France, US, Korea, Russia, China, Japan, Euratom

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