

Commission's view on the report of technology development for the next-generation light-water reactor (LWR)

24th August, 2010

The Atomic Energy Commission of Japan

The Atomic Energy Commission of Japan received a report on 17th August from a group (consisting of the Ministry of Economy, Trade and Industry; The Federation of Electric Power Companies; Toshiba Corporation; Hitachi-GE Nuclear Energy, Ltd.; Mitsubishi Heavy Industries, Ltd.; and the Institute of Applied Energy), regarding the results of a comprehensive intermediate self-evaluation of technology development of next-generation LWR by the above-mentioned group. This activity started in 2008 and was led by the Institute of Applied Energy with support from the government. Also included in the report was a suggested future work to be done by experts.

This self-evaluation report states that BWR and PWR plant concepts are likely to meet performance targets for the plant coming in line in Japan around 2030, and also to be competitive internationally. The report also states that the group identified the challenges to materialize the key technologies. The Commission considered that the work accomplished and the plan to complete basic designs by 2015 are appropriate as a national programme.

Further, the Commission expects that the project leadership is clarified and all relevant organizations cooperate and move forward based on the proposed approach, keeping in mind the followings;

- The whole system design to be based on consideration of a) life-cycle of the plant including decommissioning and b) associated fuel cycle,
- Spiral approach for maturing system models, and the enhancement of front-loading approaches by the use of simulation

and modeling,

- Leadership in establishing international safety standards and in driving innovation in technologies and associated business models , and
- Collaboration with those involved in basic research, as well as with safety research programs carried out at universities and national R&D institutions.

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