News briefs

Computer-based control systems important to safety (COMPSIS)

Preparations for the launch of a new joint project on Computer-based Control Systems Important to Safety (COMPSIS) have made considerable progress. The proposed project will build on the work of an earlier task force, which collected operating experience in this area and formed a discussion forum to aid regulatory bodies in the licensing of digital instrumentation and control (I&C) systems. It is planned to begin the project during the first half of 2004.

The COMPSIS project aims to facilitate the exchange of operating experience in the area of computer-based control systems important to safety. The overall objective is to improve safety management and the quality of risk analysis of the software used in I&C systems and other equipment. Software and hardware faults in safety-critical systems are typically rare and consequently most countries do not experience enough of them to be able to draw any meaningful conclusions after their occurrence. Combining information from several countries has proved a successful method for overcoming this problem in several other NEA joint projects and this approach will be employed in the course of the COMPSIS project.

Ringhals AB, Sweden

Instrumentation and control (I&C) systems based on computers are vital for the safe operation of nuclear power plants.

A COMPSIS task group was originally formed in 1996. The functions of the task group were to:

1. collect, analyse and report on the operating experience of computer-based systems in nuclear power plants in the participating countries; and
2. evaluate the evolving technology as it is applied to nuclear power plants and identify new issues that might affect the licensing and operation of computer systems in NPPs.

The task group produced a trial database and a set of guidelines issued as NEA/CSNI/R(99)14. The members of the task group concluded at the beginning of 2003 that wider data collection and an in-depth analysis of the issue was worth pursuing internationally. The NEA Committee on the Safety of Nuclear Installations (CSNI) endorsed preparations for a joint project in this area in June 2003.

For further information concerning the COMPSIS project, contact Dr. Pekka PYY (*pekka.pyy@oecd.org*) of the NEA Nuclear Safety Division.