

Losing Nuclear Expertise - A Safety Concern

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Since the mid of eighties several important changes in human beings behaviour, which influence nuclear field, can be observed – the loss of interest in studying technical disciplines (namely nuclear), strong pressure of environmental movements, stagnation of electricity consumption and deregulation of electric markets. All these factors create conditions which are leading to the decrease of job positions related to the nuclear field connected particularly with research, design and engineering. Loss of interest in studying nuclear disciplines together with the decrease of number of job positions has led to the declining of university enrolments, closing of university departments and research reactors.

In this manner just a very small number of appropriately educated new experts are brought up.

In the same moment the additional internal factor – the relative ageing of the human workforce on both sites operators of nuclear facilities and research and engineering organisations can be observed.

All these factors, if not addressed properly, could lead to the loss of nuclear expertise and the loss of nuclear expertise represents the direct threat to the nuclear safety.

The latest studies have shown that at present NPPs cannot be replaced by other kinds of electric sources and in no case by renewable ones in an efficient manner. Therefore it is necessary to carefully manage knowledge gathered in the nuclear field during the years and to keep on the nuclear safety research, education and training to ensure and upgrade safe and reliable operation of existing and future nuclear facilities. This is responsibility of both the governments of the states using nuclear applications and owners of nuclear facilities.