

The Further Development of Safety Requirements

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The Swedish nuclear power plants start to be relatively old some with more than 25 years of operation. After the Barsebaeck event (strainer clogging) in 1992 a process started to modernise the oldest of the Swedish reactors, Oskarshamn 1. It was then clear that several safety improvements also for the other power reactors, in half time of their life cycle, would be necessary. SKI started to develop general backfitting requirements to be incorporated in a new regulation, SKIFS 2004:2, the design and construction of nuclear power plants. The design standards were not the same 25 years ago. Operational experience and findings from research world wide have contributed to settle the foundation for the new requirements. The modernization must be individually adjusted for each unit because of different generations. In 2005 activities were initiated such as changes of control equipment to digital control systems and complete change of central control room, fire protection and diversity of safety systems and separation of vital equipment and protection from pipe breaks. The installation phase will be distributed over a 5 to 7 years period depending on the complexity of the safety improvement and allowing for quality in installation.