

Activities of Knowledge Management for Decommissioning of FUGEN Nuclear Power Station

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The Fugen nuclear power station is a heavy-water moderated, light-water cooled, pressure-tube type reactor. After ca. 25 year operation, Fugen started decommissioning activities after the final shutdown in 2003 and the decommissioning project will last at least until 2034. In this situation, as the transfer of knowledge and education to the next generation is a crucial issue, integration and implementation of a system for knowledge management is necessary to solve it. For this purpose, a total of knowledge management system (KMS) for decommissioning was proposed. In this system, we have to arrange, organize and systematize the data and information of the plant design, maintenance history, waste management records etc. The collected data, information and records should be organized by computer support system, e.g., data base system, as well as advanced information technologies such as 3D-CAD (Computer Aided Design), VR (Virtual Reality) and AR (Augmented Reality). It will become a base of the explicit knowledge.

Moreover, measures for extracting tacit knowledge from retiring employees are necessary. The experience of the retirees should be documented as much as possible through effective questionnaire or interview process. The integrated knowledge mentioned above should be used for the planning, implementation of dismantlement or education for the future generation.