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Implementation of Nuclear Knowledge Management Program on Radioactive Waste Management

Nuclear power remains an important option for many countries to improve energy security, provide energy for development and fight climate change. The greenhouse gas emissions from nuclear power plants and are much smaller than those associated with coal, oil and natural gas, and the routine health risks are much smaller than those associated with coal. The nuclear power generation constitutes the intermediate phasebetween the front- and back-ends of the nuclear fuel cycle. But, there are in this intermediate phase routine releases of radionuclides to the surrounding environment in liquid and gaseous forms. A major environmental concern related to nuclear power is the creation of radioactive wastes such as uranium mill tailings, spent fuel from the reactors, and other radioactive wastes. These materials can remain radioactive and dangerous to human health for thousands of years. Radioactive wastes are subject to special regulations that govern their handling, transportation, storage, and disposal to protect human health and the environment from the hazards of radioactive elements.

Nuclear Knowledge Management at the project, organizational and national levels is an integrated and systematic approach applied to all stages of the knowledge cycle, including its identification, sharing, protection, dissemination, preservation and transfer. Knowledge management systems support nuclear organizations in strengthening and aligning their knowledge. Knowledge is the nuclear energy industry's most valuable asset and resource, without which the industry cannot operate safely and economically. In the organizational context, nuclear knowledge management supports the organization's business processes, and involves applying knowledge management practices. These may be applied at any stage of a nuclear facility's life cycle: research and development, design and engineering, construction, commissioning, operations, maintenance, refurbishment and life time extension, decommissioning and waste management.

Here in this paper we will perform the implementation of nuclear knowledge management program on radioactive waste management.

Primary author: Dr ELSAYED, Hade (Egyptian Atomic Energy Authority)

Presenter: Dr ELSAYED, Hade (Egyptian Atomic Energy Authority)

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