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PROGRESS ON THE ESTABLISHMENT OF THE CENTRALISED INTERIM STORAGE FACILITY IN RESPONSE TO SPENT FUEL MANAGEMNT SUSTAINABILITY IN SOUTH AFRICA.

South Africa's Spent Nuclear Fuel (SNF) is generated from Eskom's only two 1 840 MWe nuclear power reactors at the Koeberg Nuclear Power Plant (NPP) and from Necsa's only one research reactor (SAFARI-1) at the Pelindaba nuclear research site. The establishment of the Centralised Interim Storage Facility (CISF) follows recent reports from the power utility Eskom who runs the NPP at Koeberg that there is limited space for storing SNF on site. Moreover, the lifetime of the NPP has been extended to 2045 which implies that with time, constraints on storage at reactor site will be increased. However, the long-term storage will be established for all the nuclear reactors in the country.

The South African Radioactive Waste Management Policy and Strategy of 2005 recommends that South Africa must adopt the strategy of storing SNF away from the reactor in an above ground dry CISF, followed by a final disposal in a Deep Geological Repository (DGR). The CISF is envisaged to be built off site at the Vaalputs only Radioactive Waste Disposal facility. The facility will be sustained into time with continuous monitoring of radiation in lieu of the DGR for ultimate disposal. Management of SNF still pose a great challenge with many member states not yet having facilities for the final disposal of SNF and associated High Level Waste (HLW), mainly due to the economics associated with developing such required facilities. The project is still at a developmental phase with the feasibility study undergoing a review. It has been established that the project is lacking funds and human resources. The paper outlines the current progress, challenges, and plans for the establishment of the CISF in South Africa.

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