The ESTABLISHMENT of NECESSARY frameworks and infrastructure for NUCLEAR decommissioning AS PREPAREDNESS FOR nuclear power plant DEPLOYMENT in GHANA

K.O. AKYEA-LARBI

Radiation Protection Institute, Ghana Atomic Energy Commission

Accra, Ghana

Email: kofi.akyea-larbi@gaec.gov.gh

G. GBEDDY E.T. GLOVER, Y. ADJEI-KYEREME, E. AKORTIA, P. ESSEL, E.M. AMEHO

Radiation Protection Institute, Ghana Atomic Energy Commission

Accra, Ghana

**Abstract**

## The successful and peaceful application of nuclear science and technology particularly nuclear power plant in Ghana calls for the establishment of all the necessary regulatory and physical infrastructural framework for decommissioning in tandem with local and international requirements such as the International Atomic Energy Agency’s Fundamental Safety Principles and General Safety Requirements. Ghana has successfully passed the Nuclear Regulatory Authority Bill 2014 in August 2015 by the Parliament leading to the uncoupling of the Nuclear Regulatory Authority from the Ghana Atomic Energy Commission (GAEC). In compliance with the established regulations, Ghana has successfully converted her 30kW research reactor from highly enriched Uranium (HEU) fuel to low enriched Uranium (LEU) fuel with the return of all vital components to the manufacturer in China. Consequently, Ghana only has legacies for decommissioned sealed radioactive sources. This paper emphasizes some important decommissioning framework including financing of decommissioning, decommissioning plan, obligations of an authorized person for decommissioning, and decommissioning of nuclear facilities. The physical infrastructural requirement for the safe and secure conduct of decommissioning in Ghana needs further commitment and allocation of necessary resources.