IPR-R1 TRIGA RESEARCH REACTOR DECOMMISSIONING: PRELIMINARY PLAN

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ABSTRACT

The International Atomic Energy Agency is concerning to establish or adopt standards of safety for the protection of health, life and property in the development and application of nuclear energy for peaceful purposes. In this way the IAEA recommends that decommissioning planning should be part of all radioactive installation licensing process. There are over 200 research reactors that have either not operated for a considerable period of time and may never return to operation or, are close to permanent shutdown. Many countries do not have a decommissioning policy, and like Brazil not all installation has their decommissioning plan as part of the licensing documentation. The Nuclear Technology Development Centre (CDTN/CNEN) has a TRIGA Mark I Research Reactor in operation for 47 years with 3.6% fuel burn-up. The original power was 100 kW and it is being licensed for 250 kW, and as no decommissioning policy was adopted, it needs to do the decommissioning plan for it. This paper presents the description of IPR-R1 TRIGA reactor and the preliminary plan for its decommissioning, as part of the licensing requirements.