

Abstract

A systematic programme for ageing management of research reactors

Deshraju Rao¹ and Edward Bradley²

IAEA

As per the IAEA research reactor database, more than seventy percent of operating research reactors are over thirty years old. The analysis of the events reported to “Incident Reporting System for Research Reactors” indicates “ageing” as one of the main causes for the events. IAEA Safety Standards require that a systematic ageing management programme for research reactors should be established and implemented. This presentation covers the essential aspects related to ageing management programme in various stages of the life time of research reactors to ensure the safety. The main elements of a systematic ageing management programme that include screening of “systems, structures and components,” ageing degradation – identification – minimization – detection and trending – mitigation are explained. The interfaces of ageing management with other technical areas including are discussed. Various IAEA activities in the ageing management of research reactors are also described.

¹Deshraju Rao
RRSS/NSNI/IAEA
D.V.Rao@iaea.org

²Edward Bradley
RRS/NEFW/IAEA
E.Bradley@iaea.org