

Integrated management system, configuration and document control for research reactors

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An integrated management system is a single management framework establishing all the processes necessary for the organisation to address all its goals and objectives. Very often only quality, environment and health & safety goals are included when referred to an integrated management system. However, within the research reactor environment such system should include goals pertinent to economic, environmental, health, operational, quality, safeguards, safety, security, and social considerations. One of the important objectives of an integrated management is to create the environment for a healthy safety culture.

Configuration management is a disciplined process that involves both management and technical direction to establish and document the design requirements and the physical configuration of the research reactor and to ensure that they remain consistent with each other and the documentation. Configuration is the combination of the physical, functional, and operational characteristics of the structures, systems, and components (SSCs) or parts of the research reactor, operation, or activity.

The basic objectives and general principles of configuration management are the same for all research reactors. The objectives of configuration management are to:

- a) Establish consistency among design requirements, physical configuration, and documentation (including analyses, drawings, and procedures) for the research reactor;
- b) Maintain this consistency throughout the life of the research reactor, particularly as changes are being made; and
- c) Retain confidence in the safety of the research reactor.

The key elements needed to manage the configuration of research reactors are design requirements, work control, change control, document control, and configuration management assessments.

The objective of document control is to ensure that only the most recently approved versions of documents are used in the process of operating, maintaining, and modifying the research reactor. Document control helps ensure that:

1. Important facility documents are properly stored;
2. Revisions to documents are controlled, tracked, and completed in a timely manner;
3. Revised documents are formally distributed to designated users; and
4. Information concerning pending revisions is made available.

Configuration and document management within an integrated management system are essential requirements for the safe operation, utilisation and modification of any research reactor.

Organization

Necsa

Country

South Africa

Authors: Mr STEYNBERG, Benji (SAFARI-1 Necsa); Mr DU BRUYN, Koos (NECSA)

Presenter: Mr DU BRUYN, Koos (NECSA)

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