Parallel SESSION 7.B: Regulatory aspects of accelerator facilities Paper No. 47

AGILE REGULATORY OVERSIGHT: ADAPTING REGULATIONS TO ACCOMMODATE RAPIDLY CHANGING ACCELERATOR TECHNOLOGY

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Canadian nuclear facilities of all types are migrating from nuclear substances to accelerator-based facilities, mirroring the trend first observed in the medical sector in the 1980's and 90's. This shift has been motivated by the need for more flexible and higher throughput facilities, as well as a desire to move away from nuclear-substance-based facilities that require more onerous security requirements. In order to meet this demand, accelerator manufacturers are devising increasingly novel designs and applications, sometimes testing the limits of the current regulatory system.

The Canadian Nuclear Safety Commission (CNSC) is currently in the process of proposing amendments to the regulations which govern the use of particle accelerators in Canada. The intent is to provide modernized and flexible regulations, which will not unnecessarily restrict or hinder innovation in the nuclear industry, while still ensuring that these facilities continue to operate in a safe and secure manner.

This presentation will describe some of the novel new applications of accelerators in Canada, and provide a high level description of the proposed new methods the CNSC is considering in the regulation of these facilities.