

Enhancing Nuclear Security of Nuclear and Radiation Facilities from the perspective of Regulatory Enforcement and Inspection

Abstract

Nuclear power plants are one of the most important nuclear facilities, are considered to be a safe, economically viable, sustainable and environment friendly power source for the socio-economic development of any country. Most of the embarking countries have established or are in the process of establishing their legislative and regulatory framework to assess and subsequently authorize nuclear security within the licensing framework for nuclear and radiation facilities. In order to maintain nuclear security, in each phase of the life cycles of nuclear and radiation facilities, at least the following shall be inspected by the nuclear security authority on a regular, scheduled basis in a manner specified. This study aims to enhance and improve the regulatory enforcement and inspection by addressing in national law and regulations clearly establish inspection rights of regulatory authority, training of inspectors to be qualified, description of process for announced and unannounced inspections, development of procedures and launch improve and modification programmes designed to ensure that inspection services are carried efficiently and effectively, having respect to the costs for government in the delivery of inspection services and adapting the organisation of inspection services to utilise changes in technology and social organisation to achieve regulatory objectives. As well as the regulatory authority shall draw up an inspection plan containing inter-alia the subject matter of scheduled inspections, the period inspected, the timetable and means of the inspections, the criteria for inspections and other particulars defined by regulatory authority. Also perform a document review and identify discrepancies between the facility documentation and the national regulatory requirements, where verify documentary evidence exists to verify requirements defined in the licensee security plan and implementation procedures where regulatory staff categorizes these violations in terms number of levels or colour of severity to show their relative importance or significance.

The main targets for improvement and modification are generally to reduce the administrative loads and other obstacles, to improve the effectiveness of enforcement practices and therefore improve regulatory compliance –and in some cases to increase efficiency and thus decrease budgetary costs to governments. The improve of enforcement and inspections is as much about changing methods and culture as it is about reforming institutions organisational mechanisms and legislation. Finally, we recommended details to improve the regulatory enforcement and inspection of nuclear security for nuclear and radiation facilities.

Gender

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