

Analysis of the regulatory framework and the interrelations between safety and sustainability during the back end of nuclear fuel cycle facilities

Fuhr, E.I.L.¹, Núñez, M.P.², Chavez Leguizamon, J.³

Nuclear Regulatory Authority (Argentina)

ABSTRACT

This paper aims to describe the interrelations between the regulatory framework of the Nuclear Regulatory Authority (ARN) and the sustainable development objectives (SDGs 2030) towards the back-end of nuclear fuel cycle facilities, as well as the perspectives and challenges.

In addition, experiences will be presented from the regulatory oversight framed in the national legislation, intern policies of ARN and its strategic planning and international cooperation related to the fulfillment of the SDGs 2030.

The paper points out regulatory safety requirements, taken from the current regulations and aligned with the SDGs 2030, the development by facilities to implement technologies and procedures that allow optimizing processes that aim to minimize radioactive waste and releases.

A graded approach to regulatory verifications activities will be evaluated, considering the classification of the facilities and their associated radiological risks that may impact on the workers, the public and the environment. The justification of the practices and the principles of optimization of radiation exposures will be taken into account.

Responsibilities of the interested parties involved in the licensing processes for the back end of nuclear fuel cycle facilities and their influence on decision-making considering economic, social and environmental factors will be described.

Finally, this paper will bring conclusions and opportunities for improvement to be addressed in terms of updating the regulatory framework concerning the integration of the concepts of safety and sustainability.

¹ efuhr@arn.gob.ar

² mnunez@arn.gob.ar

³ jchavez@arn.gob.ar