International Conference on Small Modular Reactors and their Applications



Contribution ID: 202 Type: Oral

SECURITY BY DESIGN: UNDERSTANDING HOW TO APPLY IT TO SMR

Security by design is of paramount importance for all nuclear facilities, but even more so for SMRs. In fact, preliminary studies show that nuclear security could be one of the main operating costs of SMRs.

Security by design offers a unique opportunity to design reactors that are more cost-effective and competitive. This paper will explain, based on the French experience, why nuclear security should be better taken into account from the beginning. While it is not possible to share confidential information in an international conference, the historical example of the Opéra Garnier, one of the most famous buildings in Paris, will be used to illustrate the concept of security by design.

Who remembers today that security was one of the concerns of this building? In fact, its construction was decided after a bomb attack against Napoleon by Italian terrorists in front of the Paris Opera.

The principles applied to the Opéra Garnier are still relevant for SMRs, including a global approach to the protection of the facility and the transportation of nuclear materials, protection against stand-off attacks, and optimization of access to reduce the insider threat.

Country OR International Organization

France

Email address

dsn.smr@developpement-durable.gouv.fr

Confirm that the work is original and has not been published anywhere else

YES

Author: KOPPE REGAMOUNDJOU, Mélissa

Co-author: LANGUIN, Thomas (MINISTRY OF ENVIRONMENT, ENERGY AND THE SEA FRANCE)

Presenter: KOPPE REGAMOUNDJOU, Mélissa

Track Classification: Topical Group C: Safety, Security and Safeguards: Track 11: Security of SMR:

Physical Protection and Computer Security