Building Future Safeguards Capabilities
SYMPOSIUM
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Addressing Nonproliferation Needs in Advanced Reactors

In the United States and elsewhere, dozens of innovative start-up companies and other stakeholders are pioneering new designs that promise to lower risk and cost and reduce deployment barriers. The authors have been studying the implications of international deployment of advanced reactors, which present a variety of different safeguards challenges. For example, the IAEA has no experience applying safeguards to a commercial molten salt reactor, and the liquid fuel used by some designs presents a larger deviation from other types of reactors in the sense that a traditional item accountancy approach will not work. The study is also intended to influence reactor designers while their concepts are still at an early stage, especially as U.S. companies may not be thinking about IAEA safeguards during their design process if their first deployment is intended to be in the United States. If these reactor designs do not incorporate safeguards-by-design principles, future international deployments could involve retrofits at the plant site and added burden on the IAEA. This paper will present interim findings and recommendations from the ongoing study and discussions with IAEA staff. In particular, it will include preliminary recommendations to the U.S. Department of Energy concerning R&D priorities for advanced reactor safeguards technologies.

Which "Key Question" does your Abstract address?

NEW1.1

Which alternative "Key Question" does your Abstract address? (if any)

NEW1.2

Topics

NEW1

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