



PR&PP Workshop

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Panel 2 : Collaborative studies

Jean-Louis Carbonnier

CEA

PR&PP EM as a tool for proliferation debates



Proliferation resistance is a subject of impassioned debates. For instance :

→ **Cycle strategy for nuclear growth in the world,**

- Some countries think that closed cycle is less proliferation resistant and has to be postponed until development of so called “proliferation resistant technologies”.
- Other countries think that closed cycle is necessary to address properly waste management and sustainability and that proliferation resistance of closed cycle may be at least equivalent to PR of open cycle.

→ **Safeguards (preparing for future verification challenges)**

- Debate between inspectorates and operators to determine optimum for safeguards taking into account impact on operation.
- Safeguards by design offers opportunity for more efficiency but does not preclude the search for optimum.

→ Collaborative studies using PR&PP EM should help resolving these debates

A recognized and unbiased tool



→ Improving PR of a given NES

PR&PP EM helps identifying weaker pathways for this given NES, and allows to perform improvements, in design and/or safeguards.

This is not so easy due to conflicts in NES design between different requirements (economy, reliability, safety, PR ...)

→ Comparing PR of different NES

The job becomes very touchy ! We need absolute values for pathways estimation about different NES ...

→ During evaluation process the most sensitive sequence is certainly estimation of measures.

- Expert elicitation is a means to improve objectivity of evaluation
- Collaborative work is necessary to identify sensitive matters and to make progress towards the ultimate goal of a recognized and unbiased methodology.