OECD/NEA Workshop on Accident Tolerant Fuels, Workshop Expectations

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OECD/NEA Workshop on International Fuels
Paris, France (December 10-12, 2012)
Workshop expectations

The topics of the workshop will include technical and safety issues of developing accident tolerant fuel.

The workshop IS about defining requirements for selection among various options during the feasibility phase of the development process:

- Identification of important attributes (properties, performance characteristics) for ATF
- Identification of operational and safety constraints for the new fuels
- Metrics to evaluate various candidate technologies
- Analyses/measurements required to quantify the metrics
- Exploring the possibility of an international forum to discuss and quantify the metrics and compare the assessment results

The workshop IS NOT about identifying and proposing design solutions:

- NOT selecting or ranking candidate fuel/clad technologies (except as examples to guide the discussions)
- NOT selecting reactor technologies or designing new reactors (cover the spectrum of existing designs)
Scientific and Engineering Issues

- Define critical attributes: properties, performance characteristics
- Map the merit of the attributes against potential operational or safety envelope benefits
- If possible, quantify the target value for the attribute/property
- Define required analyses (accident scenarios) to quantify the target value
- Potential assembly design changes within the design constraints

Safety and Regulatory Issues

- Accident scenarios to be considered – safety envelope definition
- Operations envelope for initial conditions based on margins required during transients
- Defense-in-depth issues and the role of fuel design
The discussions is the major focus of the workshop

Please keep the presentations within the allocated time

Technology presentations are limited to 20 min. (no exceptions)

- Keep the presentation to 15 min (5 min questions and not comments)
- Provide and overview of the concept considered
- State concisely what attributes makes this technology accident tolerant and why (quantitatively if possible)
- State the pros and cons
- Summarize what is known and what is not known and path forward