

Technical Meeting on Advanced Technology Fuels: Progress on their Design, Manufacturing, Experimentation, Irradiation, and Case Studies for their Industrialization, Safety Evaluation, and Future Prospects

Contribution ID: 25

Type: **not specified**

**BWR perspective of industrial applications of ATF
(high burnups, FFRD, time @ temperature)**

Friday 31 October 2025 09:25 (25 minutes)

In an age that advanced nuclear reactors are at the forefront of the research community, we should not forget that future of the nuclear industry heavily depends on the safe, reliable, economic operation of the current LWR fleet. With the advances in modeling and simulation techniques, methodologies, tools, and with the significant operating experience, LWR fleet capacity factor and reliability have improved significantly over the last few decades. That said, changing economic priorities, development, and advancement of competing technologies, the LWR industry has been continuously investigating new initiatives using innovative solutions to further improve fleet's economics as well as overall safety of the plants. However, these new opportunities often present technical and regulatory challenges. Experts from LWR industry will discuss these challenges as well as the new opportunities identified while addressing these challenges via application of innovative solutions, such as for the fuel fragmentation relocation and dispersion (FFRD), dose consequences, and time at temperature (t@T) concepts.

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Session Classification: 5

Track Classification: Future prospects of ATF