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DEVELOPMENT OF A LOCA FUEL SAFETY EVALUATION METHODOLOGY FOR CR-COATED CLADDING ATF - TRACTEBEL Contribution to IAEA CRP ATF-TS (2021-2024)

Thursday 30 October 2025 14:25 (25 minutes)

Following the successful Coordinated Research Project (CRP) on Fuel Modelling in Accident Conditions (FUMAC) [1][2], the International Atomic Energy Agency (IAEA) initiated a new CRP ATF-TS in 2021 to support the development and evaluation of Advanced Technology and Accident Tolerant Fuels (ATFs) [2].

TRACTEBEL's contribution to the CRP ATF-TS focused on developing a methodology to assess the performance of Cr-coated cladding under Loss-of-Coolant Accident (LOCA) conditions. This involved improving the FRAPTRAN-1.5 fuel performance code and applying it to simulate experimental and reactor scenarios.

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