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VERIFICATION OF CORE FUEL IRRADIATION HISTORIES IN A LIGHT WATER REACTOR

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To date no technique has been available to the Agency to perform measurements to confirm the irradiation history of individual core fuel elements in order to resolve anomalies resulting from, for example, surveillance failure. At a series of measurements using the fork detector in an LWR in one member state, it was possible for the Agency, with the cooperation of the member state and the US Support Programme, to satisfactorily confirm the irradiation histories of the reactor core fuel from different core loadings. The paper describes the techniques used and the results obtained in the measurements of fuel with different irradiation histories.

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