

## **PWR and BWR Fuel Assay Data Measurements**

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### Abstract

In the framework of a high burnup fuel demonstration program, rods with an enrichment of 4.5% <sup>235</sup>U were operated to a rod average burnup of about 70 MWd/kgU in the Spanish Vandellós 2 pressurised water reactor. The rods were sent to hot cells and used for different research projects. This paper describes the isotopic composition measurements performed on samples of those rods, with burnup values ranging from 40 MWd/kgU up to 75 MWd/kgU. The main results obtained and their comparison with values calculated using different methods are presented.

In 2008, a project to measure the isotopic composition of irradiated BWR fuel was started. The mother rod was irradiated in the Swedish Forsmark-3 boiling water reactor, and the fuel samples selected have a burnup ranging from 40 to 55 MWd/kgU. The paper describes the scope of the project and its current status.