

## FiR1 TRIGA research reactor decommissioning project

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FiR1 is a 250 kW TRIGA Mark II type open pool reactor from General Atomics. It has been in operation for education, research, BNCT treatments and isotope production in Finland for years 1962-2015 and is planned to be decommissioned in following few years. Overall the reactor has been in use for around 11 500 MWh. Radioactive waste will consist mainly of concrete, steel, aluminium, graphite and BNC Fluental neutron moderator materials.

At first, the presentation introduces FiR1 reactor history and scientific use of it. This is followed by an indicative schedule of the VTT decommissioning project and on-going work. This includes licensing, agreements and procurement processes on dismantling planning, dismantling waste management and return of SNF. We present the calculation system for the activity inventories in the reactor structures and preliminary activity measurements in different materials. Some planned dismantling methods are illustrated and an outlook to future steps is presented.