



References

Sizewell B, UK

With mobile GNS FAFNIR and NEWA plants GNS filled 55 MOSAIK® containers with ion exchange resins and de-watered them, emptying the ILW resin tanks at British nuclear power plant Sizewell B. Total of six months took the project to which a three-year planning phase, structural changes on the ground and obtaining various regulatory approvals have gone before.



Sizewell: MOSAIK®

Bradwell, UK

In autumn 2013 two tanks at the old Magnox site at Bradwell-on-Sea were emptied with the GNS FAVORIT® plant. Sludge and ion exchange material have been dried very successfully - the remaining moisture content of the final waste product is proved to be less than 1 %.



Sizewell: NEWA & FAFNIR

Saida-Bay, Russia

The state-owned Energiewerke Nord GmbH has built on behalf of the Federal Ministry of Economics a disposal center for radioactive waste from the decommissioning of nuclear submarines of the Russian Northern Fleet. The disarmament assistance of the Federal Republic of Germany started in late 2003 on the basis of the G8 Global Partnership countries against the proliferation of weapons of mass destruction. The German-Russian project creates the technical basis to support the reactor compartments of decommissioned and disassembled nuclear submarines safely over a long period to final disposal. For the conditioning of radioactive waste, GNS FAKIR plant and GNS PETRA drying facility were used in the Waste Management Centre in Saida Bay near Murmansk.



Bradwell: FAVORIT®

Lubmin, Germany

To condition the arising radioactive effluents during the decommissioning of their site Lubmin, Energiewerke Nord GmbH (EWN) built a new building, the central decontamination and water treatment plant (ZDW). GNS received the order for the complete equipment of the room to the final conditioning of the evaporator concentrates and mixed waste in 2008.

To condition the evaporator concentrates generated from the raw sewage GNS has developed a fully automatic drying plant with associated infrastructure including drying chamber conditioning and built within the ZDW.

Stade, Germany

In summer 2007, GNS has brought four steam generators from the dismantling of the German nuclear power plant Stade to Studsvik to Sweden. First, the steel giants were "disconnected from the system". Therefore the pipes that they combined on one side with the reactor and the reactor coolant pumps and on the other side with the turbines in the power house were cut.



The openings were closed with a welding procedure according to the specifications of GNS, previously approved by the Federal Institute for Materials Research and – testing. In Sweden, 660 tons of components - 100 tons more than a fully loaded and fully fueled Airbus A380 - had to be dismantled and controlled recycled.

Reactor Merlin, Germany

From 1964 to 1985 research reactor FRJ-1 (MERLIN) was operated on the site of the Research Centre Jülich (FZJ). At the end of 2000 GNS has won a contract to decommission the reactor.

The demolition was carried out in various mining phases from top to bottom, reducing the reactor block from the inside out to exploit the maximum shielding effect.



Rückbau Merlin

The decommissioning of the reactor was successfully completed in late 2003.