

References

Decommissioning Projects



**Wissenschaftlich-Technische Ingenieurberatung GmbH
Karl-Heinz-Beckurts-Str. 8, 52428 Jülich**

**Tel.: +49 2461 933-0
Fax: +49 2461 933-300
E-Mail: wti@wti-juelich.de
Homepage: www.wti-juelich.de**

Reference list: Decommissioning planning of nuclear facilities

Customer	Project	Services	Year
AVR GmbH	Decommissioning planning of the AVR reactor	<ul style="list-style-type: none"> • Planning services for the decommissioning of the AVR in Jülich • Preparation of a contamination atlas for the ring annexes (§ 7 AtG) • Preparation of the disposal concept for the total removal of the AVR (selection of packages, specification of waste products, determination of waste processing, of handling sequences, etc.) (§ 7 AtG) • Preparation of the AVR activity atlas, including sampling and extensive radiochemical analyses (§ 7 AtG) 	2002 to 2013
AVR GmbH	Filling the AVR reactor vessel with lightweight cellular concrete	<ul style="list-style-type: none"> • Concept for backfilling the AVR reactor vessel with lightweight cellular concrete • Preparation of licensing documents for the backfilling of the AVR reactor vessel (§ 7 AtG) • Preparation of project descriptions and accident analyses • Preparation of the quality assurance manual for the backfilling • Transport study for the transport of the AVR reactor vessel to the AVR interim storage • Supervising the process of backfilling with approximately 500 m³ cellular lightweight concrete • Investigating the compatibility of lightweight cellular concrete with reactor materials 	2006 to 2008 2007 2008 2008 to 2012
EnBW Kernkraft GmbH	Calculation of RDB activation and of near-to-core structures of KKP 1 nuclear power plant, as for the decommissioning planning	<ul style="list-style-type: none"> • Determination of neutron flow distributions and neutron spectra • Calculation of the activity of (Konrad relevant) nuclides • Comparison between calculations and measurements 	2012 to 2013
EnBW Kernkraft GmbH	Calculation of RDB activation and of near-to-core structures of GKN-1 nuclear power plant, as basis for the decommissioning planning	<ul style="list-style-type: none"> • Determination of neutron flow distributions and neutron spectra • Calculation of the activity of (Konrad relevant) nuclides • Comparison between calculations and measurements 	2013 to 2014

Reference list: Decommissioning planning of nuclear facilities (continued)

Customer	Project	Services	Year
E.ON Kernkraft GmbH Stade nuclear power plant	Packaging concepts for radioactive waste	<ul style="list-style-type: none"> • Packaging concepts for radioactive waste in accident resistant and non-accident resistant packages for storage in LarA-KKS waste storage (§ 7 StrlSchV) • Accident analyses for waste packages • Releases from waste packages under normal operating conditions and under accident conditions, including radiation exposure 	2005 to 2012
Forschungszentrum Jülich GmbH	Restoration of the decontamination operating building	<ul style="list-style-type: none"> • Preliminary planning, design engineering and approval planning for the partial decommissioning and restoration of the decontamination building (§ 7 StrlSchV) 	1991 to 1996
Forschungszentrum Jülich GmbH	Decommissioning planning of FRJ-1 (MERLIN) research reactor	<ul style="list-style-type: none"> • Safety report „Decommissioning of the reactor block and the reactor set-down area“ (§ 7 AtG) • Preparation of safety report „Release measurements and release“ (§ 7 AtG) • Preparation of a packaging concept for the reactor block and the reactor set-down area (§ 7 AtG) • Cost calculation and choice of packaging concept for decommissioning (§ 7 AtG) • Detailed planning for the decommissioning of the reactor set-down area (§ 7 AtG) • Detailed planning including the preparation of enquiry documents for the decommissioning and reconstruction of the irradiation facility BE 27 (§ 7 AtG) 	1995 to 2007
Forschungszentrum Jülich GmbH	Decommissioning planning of FRJ-2 (DIDO) research reactor	<ul style="list-style-type: none"> • Preparation of decommissioning concepts for the top shielding, the ring shielding and the reactor block (§ 7 AtG) • Preparation of technical specifications • Preparation of handling concepts • Preparation of accident considerations • Design engineering • Radiological characterisation • Preparation of packaging concepts 	since 2006

Reference list: Decommissioning planning of nuclear facilities (continued)

Customer	Project	Services	Year
Forschungszentrum Jülich GmbH	Planning and licensing documents for the decommissioning of hot cells	<ul style="list-style-type: none"> • Preparation of a decommissioning concept for the large hot cells, including calculation (§ 9 AtG) • Preparation of licensing documents for the decommissioning of the HZ3 cell row in the large hot cells (§ 9 AtG) • Preparation of licensing documents for the decommissioning of the AVR installations in the large hot cells (§ 9 AtG) • Preparation of licensing documents for the decommissioning of the „closed air circulation circuit in the large hot cells“ (§ 9 AtG) • Detailed planning of the decommissioning of cell rows BZ 2 and BZ 3 of the fuel cell laboratory (BZL), including the preparation of tender documents (§ 9 AtG) 	1996 to 2010
Gundremmingen nuclear power plant (KGG)	Decommissioning of Block A of Gundremmingen nuclear power plant	<ul style="list-style-type: none"> • Preparation of packaging and disposal concepts • Calculating the activity of components from the decommissioning of Gundremmingen nuclear power plant (KRB-A) • Preparation of waste package documentations 	1995 to 2013
Gundremmingen nuclear power plant (KGG)	Packaging concepts and waste package documentation for operating and decommissioning waste	<ul style="list-style-type: none"> • Packaging concepts for RDB parts, plant parts, concrete from the biological shield of Block A • Packaging concepts for resins, sludges, concentrates and mixed waste from Blocks A, B and C • Waste package documentations 	Since 1995
Rheinische Friedrich-Wilhelms-Universität Bonn	Restoration of a radionuclide laboratory at Bonn University	<ul style="list-style-type: none"> • Assessment of conditions, planning of refitting measures and supervision of restoration tasks (§ 7 StrlSchV) 	1997 to 1999
RWE Power AG	Decommissioning of Kahl experimental nuclear power plant	<ul style="list-style-type: none"> • Preparation of packaging and disposal concepts • Calculating the activity of components from the decommissioning of Kahl experimental nuclear power plant (VAK) • Preparation of waste package documentation 	1995 to 2010

Reference list: Decommissioning planning of nuclear facilities (continued)

Customer	Project	Services	Year
RWE Power AG	Decommissioning planning of Mülheim-Kärlich nuclear power plant	<ul style="list-style-type: none"> • Preparation of disposal and packaging concepts • Calculating the activation of components from the periphery of the biological shielding • Planning the retrofitting of the emergency building to an interim storage for radioactive waste 	2002 to 2006
WAK GmbH	Decommissioning planning for the of KNK II	<ul style="list-style-type: none"> • Preparation of packaging concepts for sodium cold traps, caesium traps, reactor lid, biological shield and thermal shield (§ 7 AtG) • Assessment of nuclide vectors of components and radioactive waste and activation calculations (§ 7 AtG) 	1998 to 2013
WAK GmbH	Decommissioning planning of the WAK processing cells (VEK) (Common project with GNS)	<ul style="list-style-type: none"> • General breakdown of the measures required for obtaining the decommissioning license (§ 7 AtG) • Description of the transfer and transport paths of dismantled components and systems in VEK • Planning the adaptation of cell V7 to the logistics for the carrying out of decommissioning tasks • Planning the measures for remote decommissioning in the VEK process cells and for the exhaust gas caisson • Planning of ventilation measures for the decommissioning of VEK • Technical description of the refitting of the cell V7 docking facility 	2010 to 2011
WAK GmbH	Preparing the concept for the repository compatible packaging of radioactive decommissioning waste from WAK and VEK operation (§ 7 AtG)	<ul style="list-style-type: none"> • Preparation of packaging options • Evaluation of interim storage and repository compatibility • Preparation of strategies for delivery to a final repository 	2013
WAK GmbH	Disposal concept of the VEK decommissioning waste (§ 7 AtG)	<ul style="list-style-type: none"> • Preparation of a transport concept for removed components • Preparation of processing, packaging and storage concepts • Evaluation of the compatibility of decommissioning waste for final disposal 	2013