The ISaR Institute for Safety and Reliability

The ISaR Institute is a scientific organization offering expertise and methods for assessing and optimizing the safety and the reliability of nuclear power plants and other complex systems. Main fields of activity are consulting on nuclear and interdisciplinary safety issues, analytical research related to simulation and probabilistic safety assessment, and training of graduates for nuclear careers. ISaR is located at the campus of the TU München in Garching near Munich.

www.isar.tum.de

The Chair of Nuclear Engineering of TUM

The NTech Chair of the Technische Universität München belongs to the Faculty of Mechanical Engineering located at the Garching Campus. The chair is offering both a Bachelor and a Master program in nuclear engineering. Activities focus on applications of nuclear technology and safety analysis of nuclear systems. Current research points relate to best estimate safety analysis of NPPs and to neutronic and thermal-hydraulic methodologies.

www.ntech.mw.tum.de

The ENEN Association

The European Nuclear Education Network is a non-profit international organisation whose mission is to preserve and further develop higher nuclear education and expertise. Members are universities and organisations involved in the application of nuclear science and ionising radiation with established relations to universities. At present ENEN has 46 members in 18 countries. Most members are European universities providing high level scientific education in nuclear disciplines.

www.enen-assoc.org

Training Course on

Decommissioning of Nuclear Installations

Place
Munich, Germany

Date
February 19th - 20th, 2009

Who should attend?

The course module is tailored to university graduates in engineering and science preparing for careers at nuclear utilities, vendors, suppliers, regulators, international organisations, expert organisations and consultants. The module is also well suited for young academic professionals in nuclear organisations and for nuclear re-education of engineers and scientists working in other fields.

Lecturers

The lectures are given by internationally renowned experts and executives from industry, research institutes and universities.

Registration deadlines

Early registration: February 2nd, 2009
Late registration: February 16th, 2009

Registration fees*

Early registration: 1.000 €
Late registration: 1.200 €

* Fees include VAT, cover lectures and course material.

Public bodies and ENEN members receive a 20 % reduction.
Grants are available for a limited number of students.

Information / registration

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Germany

Phone: +49 89 289 139 - 11
Fax: +49 89 289 139 - 49

E-mail: courses@isar.tum.de
Further details and registration at www.isar.tum.de/courses

Venue and Accomodation

The lectures will be given on the premises of the Technical University of Munich.

Training Courses

Decommissioning of Nuclear Installations

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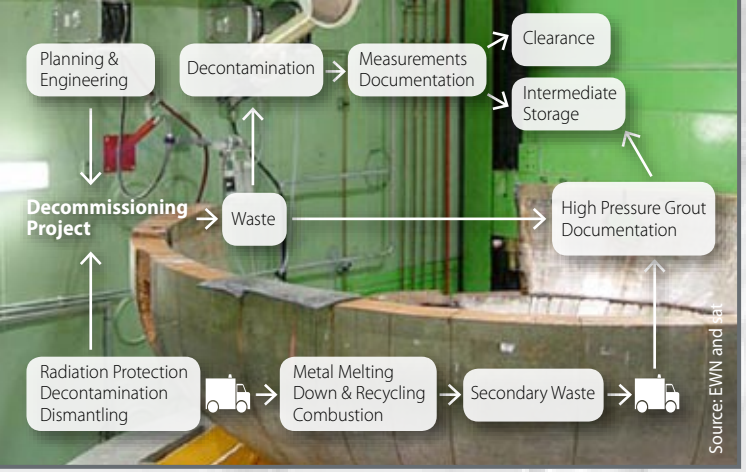

Key Events and Non-Accelerated Projected Cleanup Dates

1998	2013	2028	2032
Permanent shutdown decision	Start cleanup		Cleanup compleated
Fuel removed from reactors and transferred to wet storage		DDE scheduled to remove fuel from wet storage	

Summary

This course module covers strategies and procedures to decommission nuclear installations after their useful life. The scope ranges from early preparatory steps up to greenfield solutions. Focus is on processes related to the dismantling phase.

Objectives

Participants are expected to achieve a good understanding of

- the different phases of decommissioning
- regulatory boundary conditions
- engineering technologies used for dismantling
- quantity and composition of relevant radioactive material
- methods for conditioning, transportation and disposal of radioactive waste
- concepts for water management
- the role and functionality of operational systems for decommissioning
- requirements and procedures of radioprotection and dose management
- the implementation of lessons learned from operating experience
- the bases of time scheduling and cost estimation.

Syllabus

- Decommissioning options and phases
- Overview of decommissioning projects
- Regulatory aspects
- Specific process engineering technologies
- Basic requirements on technologies
- Dismantling
- Treatment of radioactive substances
- Conditioning of radioactive waste
- Component maintenance
- Storage and transportation
- Final disposal
- Water management
- Operational systems for decommissioning
  - ventilation
  - water collection and treatment
  - fire detection and protection
- Radioprotection and dose management
- Evaluation of experience
- Typical time schedules and cost estimations