

D&D Goal

The goal of the Argonne Decommissioning Program is to be recognized as a leader in the areas of planning, supporting and implementing the process of safe and efficient shutdown (deactivation) and decommissioning of surplus facilities at Argonne, DOE sites, non-DOE sites and foreign sites. The support provided is intended to be based upon a thorough technical understanding of the circumstances and issues involved in and relevant to the particular facility and the optimization of any and all of these processes, especially incorporation of lessons learned from earlier industry experience. Also included within this goal is an element of outreach to others in the areas of education and training, optimization, sharing of lessons learned, and enhancement of technology as well as technical information exchange.



CP-5 Reactor Site and
Decommissioning Activities

D&D Experience

Argonne's D&D Projects Group has been leading and supporting the decommissioning of research reactors and other nuclear facilities at Argonne and other sites within the United States and abroad for over 30 years. The knowledge gained and the lessons learned from this work has been applied to subsequent projects and shared with others. The hands-on decommissioning work was performed using Argonne's in-house labor forces integrated with contractor work forces. Other efforts focused on analysis of strategies and general planning support.

The Argonne D&D Projects group is recognized as subject matter experts in various areas. These areas of expertise include:

- Project management and execution including cost, schedule, quality and technical baseline management
- "Path Forward" planning, development, preparation and review (Decommissioning Plan, Radiation Protection, Characterization Plan, Health & Safety, Quality Assurance Plan).
- Project Readiness Reviews and Facility Walk-downs
- Project Health Physics and Industrial Safety Oversight
- NRC Licensing Activities
- License Termination Process
- Quality Assurance Audits and Assessments
- Decommissioning Training

Argonne Decommissioning Projects

Argonne research facilities decommissioned include:

- Experimental Boiling Water Reactor
- Chicago Pile 5 Research Reactor
- JANUS Biological Reactor Facility
- Argonne Thermal Source Reactor
- Building 212 Plutonium Gloveboxes
- 60-Inch Cyclotron Facility
- Building 200 M-Wing Hot Cells (decontaminated for safe storage)
- Building 301 Hot Cells
- Experimental Breeder Reactor-II (placed in safe storage)
- Small-scale D&D projects



D&D Support to Outside Customers

The Argonne D&D Projects Group has been providing technical support to various DOE organizations, including:

- Tokomak Fusion Test Reactor at Princeton Plasma Physics Laboratory,
- Los Alamos National Laboratory,
- Brookhaven National Laboratory,
- Savannah River Site,
- Mound Site,
- Battelle Columbus Laboratories,
- Hanford N Reactor, and
- West Valley Demonstration Project.

The Argonne D&D Projects Group also provides technical support to various non-DOE organizations, including:

- the International Atomic Energy Agency,
- the OECD/NEA Technical Advisory Group on Decommissioning,
- the U.S. Army Aberdeen Fast Pulsed Reactor Facility, and
- other foreign reactor facilities.

Recently, a team of Argonne decommissioning subject matter experts assigned to the NASA Plum Brook Research Reactor Facility assisted the USNRC licensee in completing facility preparations and other activities setting the stage for final license termination activities at the facility. They provided direct technical support to NASA in this decommissioning activity at the NASA-Plum Brook Station in the areas of construction management, radiation safety, licensing and quality assurance oversight, and industrial safety.

International Technical Support



The D&D Projects Group has been conducting D&D training for over eight years. More than 40 in-depth training courses (ranging in length from 1-2 days to 3-weeks) have been conducted for national and international trainees on the decommissioning of nuclear facilities. The courses have focused on various types of contaminated facilities – power reactors, research reactors, hot cells, glovebox facilities, production reactors, waste management facilities, and other non-reactor facilities. To date, over 1,000 participants from over 40 countries have participated in these training courses. The training course has been given at various U.S and international locations and at customer's sites.



An Argonne Decommissioning Training Course