

# Argonne National Laboratory CP-5 Reactor Facilities Decommissioning

Location:	Client:	Duration:	Scope:
Argonne National Laboratory Argonne, Illinois	NSC Energy Services	February 1999 to December 1999	Test Reactor and Support Equipment Removal

Key members of REIN staff were responsible for the execution of a subcontract to provide comprehensive project support to NSC Energy Services, a subcontractor to Duke Engineering & Services, for the decommissioning of the CP-5 Reactor Facilities at the Argonne National Laboratory. Project activities included:

- Preparation of programs, plans, and procedures to support the D&D project;
- Removal of the outer steel shell, inner steel tank, boral sheeting, activated lead, graphite, and concrete comprising the reactor bioshield;
- Removal, volume reduction, packaging, and waste management of radioactive, hazardous, and mixed waste forms from the reactor primary and auxiliary systems;
- Removal of a hot cell facility and its associated ventilation systems;
- Removal of approximately 100 spent fuel storage tubes;
- Remote handling and packaging in transfer casks of irradiated components and mixed waste with contact dose rates in excess of 200 mR per hour;
- Decontamination of two stainless steel and one concrete storage/transfer casks;
- Development and implementation of final survey approach, general survey plan, reference grid system, sample collection including chain of custody protocol, and compilation and interpretation of survey results to free release the facility consistent with NUREG/CR-5849 and NUREG/1575 (MARSSIM).



## Project Performance Features:

- ✓ Project planning and field operation personnel support (including Technicians, Equipment Operators, Supervisors, and Health & Safety Officer) for reactor facility decommissioning activities.
- ✓ Assistance in preparation of comprehensive set of programs and procedures including Project Management, Radiological Controls, Health and Safety, Quality Assurance, Waste Minimization, Characterization, Sampling and Analysis, Decontamination and Decommissioning, and Final Release Survey.
- ✓ Completion of project on schedule and within budget.