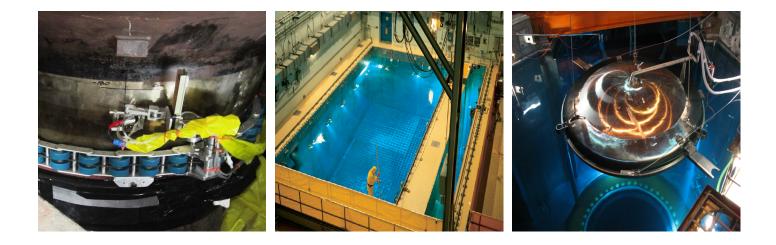
# **Products and Services**

**Department of Energy Solutions** 





Curtiss-Wright offers a comprehensive range of products and services that support the U.S. Department of Energy. Our advanced technologies and innovative solutions have been used in civilian operating reactors for over 55 years, sustaining the safe and reliable operation of nuclear operating reactors throughout the world. We continuously provide technologies and experience in support of aging equipment management/ replacement, as well as offer proactive solutions to critical plant issues.

Our accumulated expertise in nuclear plant operations enables us to supply custom solutions and services to meet the demands of national laboratories, naval research reactors, Environmental Management (EM) clean up and management efforts, and the National Nuclear Security Administration (NNSA). Our Quality Assurance programs, in conformance with 10CFR50 Appendix B and NQA-1, demonstrate Curtiss-Wright's commitment to complying with industry regulations, codes, and standards for providing reliable products and services. Our audited quality programs have been accepted for design, product fabrication, off-site maintenance, and on-site field services.

We provide value to our customers by improving critical path outage time, equipment reliability and improving worker and nuclear safety while reducing personnel radiation exposure. We use our extensive experience to provide effective neutron absorber product solutions like NETCO SNAP-IN Inserts and service offerings including in-situ and laboratory testing of neutron absorber material as well as criticality safety analyses, radiation transport, and neutron shielding calculations. Our NDE experts deliver the latest procedures, program support and services to help ensure safe operation, equipment reliability and compliance with industry and regulatory codes and standards, and our remote data center offers a cost-effective and efficient approach to data analysis. We have a successful three-decade history of providing NDE services, most notably the delivery of fully encoded Phased Array Ultrasonic Testing of piping and components.

# **Products and Services**

**Department of Energy Solutions** 

Curtiss-Wright has always been in the forefront of using leading-edge technologies to improve the safety and operation of all nuclear facilities. Innovation is one component of a continuous improvement cycle aimed at enhancing existing solutions and creating real technological breakthroughs for new market opportunities. Curtiss-Wright seeks to be an "evolutionary" provider of products and services by engaging our customers to expand on proven technologies.

Our established Innovation Team observes the performance of plant outages to determine what proven technologies can be used to streamline various maintenance, refueling and reactor disassembly/ reassembly tasks. Our innovation process is also used to continuously improve our internal work flow and processes and service executions.

# **Servicing Equipment**

- Tooling
- · Heavy Lifting Equipment
- Plugs and Seals to Support Component Disassembly
- & Reassembly during Reactor Maintenance
- Facilitation of Refueling & Other Maintenance Activities

## **Unmanned Aircraft Systems (UAS)**

- Complex External Inspections
- Hard-to-Access Internal and Confined Space
  Inspections
- Facility/Site Overtime Assessments
- Cloud-Based iHawk Visual Management Program

#### **Unmanned Ground Systems (UGS)**

- Remove humans from hazardous areas
- Reduce costs
- Hazardous material surveys and sampling
- Detection of hazardous environments
- Decontamination and descaling
- · Removing and packaging waste
- Dismantling of equipment and infrastructure

#### **Specialty Equipment**

- Specialty Shielding
- Fuel and Waste Handling
- Rigging
- Dry Cask Storage Support

#### **Manpower Services**

- · Experienced Labor
- Training Services
- Positive Nuclear Safety Culture

#### **Fuel Management**

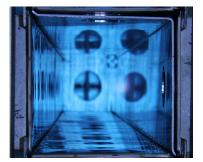
- Neutron Absorber Products
- SNAP-IN<sup>©</sup> Inserts
- BADGER Testing
- Coupon Testing
- Surveillance Programs
- Material Qualification

### **NDE Applications**

- Pre-Service and In-Service Specialty NDE
- Fully Encoded Delivery Systems
- Phased Array Ultrasonic Testing (PAUT)
- Balance of Plant (BOP) Eddy Current Testing
- **Customer Focused Innovation** 
  - Condition based maintenance
  - Sensing, monitoring, and control
  - Asset management and optimization
  - Outage and inspections
  - Equipment design



RPV Head Stud Tensioner Carousel



NETCO Snap-Ins



Cyberhawk Unmanned Aerial Inspections



Balance of Plant Services