









# **ObSolutions®**

Obsolescence Solutions for Nuclear Power Plants

## **O**B**S**OLUTIONS®

## **Focus on Results**

Curtiss-Wright's Obsolutions® program provides services, technology, equipment, and parts to combat industry obsolescence. With a catalogue of over 10,000 solutions, our commitment to "Life of the Plant" support reinforces continued solution development and availability for the entire industry. Curtiss-Wright facilitates long term reactor plant operations by minimizing obsolescence through comprehensive supply chain and inventory solutions.

## **Services**

### Repair - Refurbish - Rebuild

Curtiss-Wright maintains a team of skilled craftsmen, subject matter experts, and experienced engineers with industry experience and product expertise who can provide long-term solutions for mechanical equipment such as containment hatches and airlocks, actuators, valves, and a wide variety of electronic components.

All testing and qualification is performed to original standards per user instruction at either the power plant or Curtiss-Wright's ASME Section III qualified service centers.

## Safety-Related Replacements

Commercial-Grade Dedication (CGD) takes a commercial grade item and dedicates it through a series of tests using seismic tables, pressure/temperature/humidity chambers, Loss of Coolant Accident (LOCA) simulation testing, and EQ anaylsis — to qualify it as a safety-related component.

Curtiss-Wright has qualified thousands of commercialgrade equivalents with the same form, fit, and function as the original installed part. Qualified products include circuit breakers, valves, actuators, battery chargers, relays, switches, and myriad others.

## **Technology**

#### **RAPID** and **OIRD**

Curtiss-Wright's Readily Accessible Parts Information Directory (RAPID) database is the most efficient system for sourcing, selling, and purchasing spare and repair parts used in power plants. RAPID's powerful search engine includes databases for in-stock and surplus inventory for power and process plants, supplier catalogs, and the Obsolete Item Replacement Database (OIRD), which consists of over 55,000 items that have been identified as obsolete, as well as their equivalent solutions.

#### Seer

Interfacing directly with the RAPID database, Seer is an inventory matching application that extends resource sourcing and sharing capabilities between sites and across industries. Seer prevents unnecessary inventory growth caused by duplicate purchases, contingency buys, and return-to-stock through integration with member utilities' ERP systems. Internal site and industry inventory is matched across users, identifying duplicate stock codes that already exist in the warehouse and alternative parts and sources found by other utilities.







## **Nuclear Power Services and Support**





## **Equipment & Parts**

### **ASME III Manufacturing & Reverse Engineering**

Curtiss-Wright manufactures equipment and parts under ASME Code, safety-related, NQA-1 and commercial grade requirements. In addition to ensuring a steady supply of proprietary product designs, Curtiss-Wright also has manufacturing license agreements with critical suppliers (OEMs) who have retired nuclear quality assurance programs.

With decades of experience performing reverse engineering of mechanical, electrical, and I&C parts and components, our projects have resulted in innovative solutions and replacements. Curtiss-Wright like-for-like replacements meet or exceed performance of their predecessors, and are inspected, tested, and certified to provide the same form, fit, and function as the original equipment. Examples include digital chiller controls, plant-wide computer replacement and software upgrades, HydraNut® tensioning technology, and advanced valve and actuator designs. Legacy and reverse engineered product lines include:

- Foxboro H-Line
- Hagan 7100
- GEMAC 5000
- Bailey 7000, 820 & 860
- Versatile Measuring Instruments
- Lisle-Metrix Instruments
- Rosemount 710DU
- Analog & Digital Class 1E Isolators
- Trentec Airlocks and Specialty Doors

- Pittsburgh-Des Moines Airlocks
- PermaSeat SP Butterfly Valves
- ITT Dia-Flo® Diaphragm Valves
- ITT Cam-Tite® Ball Valves
- Circle Seal Valves
- Jamesbury Butterfly Valves
- Marotta Valves
- AMOT Valves & Components

## **Project-Level Solutions**

When obsolescence challenges exceed a single part or component, they require resources spanning multiple disciplines in a coordinated, focused project-level effort. Curtiss-Wright's phased approach utilizes a quick, concentrated, high-level assessment of the current conditions, from which an informed technical scope of work is established to address the unique issues and gaps of the specific project.

Product solution techniques can range from broad to minute, including processes such as: system audits; identification of critical components and existing BOMs; flags for missing required or missing data fields; identification of obsolete components and parts needing replacement; reconstruction of BOMs; and other project-specific requirements. The dedicated project teams at Curtiss-Wright are committed to solving large-scope challenges in support of obsolete equipment identification, replacement, and support.

#### **Certifications**

- ASME Section III "N", "NPT", "NS"
- National Board "NR" Symbol
- 10CFR50 Appendix B and 10CFR21
- ASME NQA-1 Nuclear Facilities
- ANSI B31.1 Power Piping
- AWS D1, D1.2, D1.3
- AS 9100
- RCC-M & RCC-E

## **Contact Information**

P: +1.714.982.1898 F: +1.714.528.0128

E: cwnuclear@curtisswright.com

www.cwnuclear.com



Headquarters: 2950 E Birch Street, Brea, CA 92821, U.S.A. | www.cwnuclear.com

Facilities: Berwick, PA | Cincinnati, OH | Clearwater, FL | Cromwell, CT | Danbury, CT | Freeport, PA | Hutchinson, MN | Huntsville, AL | Idaho Falls, ID | Middleburg Heights, OH | Newmarket, Ontario, Canada

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