



Commercial Grade Dedication and Qualification Services

COMMITTED TO TESTING EXCELLENCE

Since 1987, Curtiss-Wright has played a vital role in supporting the nuclear industry's hardware needs through Commercial Grade Dedication and Equipment Qualification. These services are performed in-house at our Newmarket, Ontario facility by a highly skilled engineering staff. With over 50,000 components qualified and dedicated, our testing programs maintain an extensive library containing thousands of dedication plans, qualification plans, and test reports for BWR, PWR, and CANDU Reactors.

Dedication Procedures

Curtiss-Wright follows a highly structured dedication process that adheres to industry guidelines. This methodology begins with a dedication procedure that includes technical evaluation, definition of critical characteristics for acceptance (based on safety function), acceptance criteria, acceptance test procedures, customer specifications, and data sheets. After completing the required dedication activities, a testing report and Certificate of Conformance (CoC) are issued.

Equipment Qualification

Curtiss-Wright offers a distinguished set of Equipment Qualification procedures for harsh and mild environments. Our Qualification Center is fully equipped for in-house testing for a broad range of components and assemblies.

Equipment Qualification Tests

- Loss-of-Coolant-Accident (LOCA)
- HELB/MSLB
- Vibration Aging
- Humidity Chambers
- Thermal Aging Ovens
- Steam Test Simulators
- Post LOCA Submergence Chamber
- Radiation Testing
- Mechanical/Electrical Cycling
- EMI/RFI Testing
- Seismic Qualification Testing
- Side Load Testing
- Environmental Stress Screening (ESS)



Seismic Testing Services

Curtiss-Wright has a comprehensive seismic testing facility to ensure the safety and reliability of parts, components, and systems. Our services meet the rigorous standards of EPRI, CSA, and IEE, and comply with strict regulatory standards.

Remote Witness Access

Our testing lab offers remote viewing of seismic tests through four cameras with 360° of coverage - allowing our customers to have a superior remote viewing session.

Seismic Table Specifications

- 3ft x 3ft tri-axial shaker table with 10,000 lb capacity
- Expansion plates and arms up to 108" wide
- 10-inch stroke actuators
- 160,000 ft-lb overturn capacity
- Tri-axial Random Multi Frequency (RMF) testing
- Single Axis Random Input Motion (RIM) testing
- Random, sine-sweep, continuous sine-wave, or white noise excitation
- Capacity to operate with ZPA of up to 18 g
- Frequencies of up to 200 Hz

Quality Programs

- ASME NQA-1
- ANSI N45.2
- ASME Section III
- 10CFR50 Appendix B
- 10CFR Part 21
- CSA B51 and TSSA N285
- CSA N299.1-16, CSA N289
- NUPIC and CANIAC Audited
- IEEE 344, IEEE 382, and IEEE 323

