

Qualification, Testing, And CGD Services

QualTech NP (formerly Trentec and Scientech's EGS Division) is a leading provider of Environmental Qualification (EQ), Seismic Testing and Commercial Grade Dedication (CGD) services to the nuclear power industry. Test facilities are located in Cincinnati, OH and Huntsville, AL.

Equipment Qualification and Seismic Testing

We have complete in-house testing capabilities including: multiple tri-axial and single axis seismic and vibration tables, environmental test chambers, thermal aging ovens, and steam test simulators for harsh environment testing. Our extensive library of qualification test procedures can easily be adapted to any need including new build construction requirements.

QualTech NP provides complete qualification support. In conjunction with governing specifications we evaluate the item to be qualified, prepare the plan, obtain customer approval, perform required testing, review results, and write the final qualification report.

We are the seismic facility for EPRI's SQRSTS program.

Tri-axial Tables

- 10' x 10', capacity to 10,000 pounds, accelerations to 14g's
- 2' x 3', capacity to 500 pounds, accelerations to 12g's

Single Axis Tables

- 30" x 30", capacity to 100 pounds, accelerations to 8g's
- 33" x 33", capacity to 1100 pounds, accelerations to 100g's

Chambers / Ovens

- LOCA (Loss of Coolant Accident); HELB (High Energy Line Break); MSLB (Main Steam Line Break)
- Humidity Chambers
- Thermal Aging Ovens

EMI/RFI Testing

- Electromagnetic / Radio Frequency Interference

Radiation Testing

CGD / Third party Parts Dedication

With over 50,000 items dedicated, QualTech NP has the historical data, knowledge and experience necessary to assist with the dedication of commercial grade items for use in safety-related applications.

QualTech NP can purchase and dedicate items on a turn-key basis or simply provide dedication services. Our typical dedication process includes: a detailed Dedication Procedure,



Testing/Quality Standards:

- IEEE 323, 344, 382, 572
- 10CFR50, Appendix B
- 10CFR50.49
- 10CFR21
- ANSI N46.2
- ANSI C37.98
- ASME NQA-1
- NUPIC Audited

which includes technical evaluation, definition of critical characteristics for acceptance (based on safety function), acceptance criteria, acceptance test procedures and data sheets. We perform all required dedication testing, complete a final report, and issue a Certificate of Compliance or Conformance.

QualTech developed and maintains the CGD Project Center for the Utilities Service Alliance.

Obsolescence

We have been at the forefront of equipment obsolescence solutions through turnkey Commercial Grade Dedication, and equipment qualification.

QualTech NP provides reverse engineering services for parts that are no longer available, the OEM is no longer supporting the product or is no longer in business. Replacement parts are designed, built, inspected, tested, and certified to match the form, fit, and function of the original equipment.

With our teaming partner, PKMJ, we developed the Engineered Obsolescence Solutions (EOS) methodology which identifies obsolete equipment, prioritizes vulnerability, identifies hardware solutions and implements engineering packages utilizing site specific procedures.

Once the need is identified we can provide a “best fit” OBSOLUTION utilizing one of the seven types of utility recognized solutions to obsolescence: Surplus, Special Manufacturing Runs, Repair / Rebuilding, Cannibalization, Substitution, Reverse Engineering and Design Change.

Nuclear Facility Replacement Parts include:

Electrical Components

- Analog and Digital Instrumentation
- Controllers
- Electrical Modules and Adapters
- Invertors / Power Supplies
- Molded Case Circuit Breakers
- Motors
- Relays
- Switches
- Transformers
- Circuit Breakers
- Connectors
- Electrical Connectors
- Equipment Racks
- Fuses
- Meters
- Motor Control Centers (MCC) Buckets, Cabinets
- Power Supplies
- Starters / Contactors
- Switchgear / Switchgear Circuit Breakers

Mechanical Components

- Actuators
- Chillers
- Dampers
- Fan Coil Units
- HVAC Units
- Racks and Cabinets
- Airlock Components
- Compressors
- Doors and Seals
- Gauges
- Pumps
- Valves



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