

Inspection Services and Engineered Solutions

SERVICES FOR THE NUCLEAR INDUSTRY



A HIGHER LEVEL
OF RELIABILITY®



About Acuren Nuclear

Our CSA N285.0 and CSA N299.1 certifications make Acuren Nuclear a single source provider of technology enabled asset protection and inspection solutions to nuclear utilities and its supply chain.

Acuren provides world class NDT, inspection, engineering and rope access enabled maintenance and construction services, delivered from 80 locations and utilizing over 4,000 employees across North America.

Acuren Nuclear Services is a distinct entity under the industry leading Acuren brand and is focused on the provision of inspection services and engineered solutions to nuclear utilities, constructors and equipment fabricators. Our services include, project management, quality oversight, NDE tooling innovation, design, fabrication and deployment, field inspection execution and inspection engineering. Our unique internal supply chain, technical capabilities, and industry knowledge enables us to execute projects more effectively than other providers while maintaining or exceeding the expected project performance, quality and safety requirements.

Our CSA N285.0 and CSA N299.1 programs allow Acuren Nuclear Services to act uniquely as a direct single source provider of technology enabled asset protection and inspection solutions to nuclear utilities and its supply chain. With over four decades of experience in the nuclear industry, ANS has professionals in areas of Project Management, Project Controls, Quality and Safety programs to execute large capital projects or programmatic maintenance regimens.

OUR CERTIFICATIONS



CSA N285.0



CSA N299.1



ISO 9001:2015



ISO 17025:2017 (Acuren Laboratory)



Our Programs & Services

We provide unparalleled project management for tooling solutions, mechanical services and inspection programs that supports CANDU nuclear operators in Canada and internationally.

NONDESTRUCTIVE TESTING SERVICES

- Work package specific programs (managed task)
- Conventional (MT, PT, RT, UT, ET)
- Advanced applications (PAUT, TOFD, Digital/Comp RT, GPR)
- Visual inspections (CWB, CSA)
- API storage tank and piping (certification)



PROJECT MANAGEMENT & CONTROLS

Acuren Nuclear Services can provide project management, responsible for executing a single project; or as a program manager, with overall responsibility for complex programs. Our model is based on industry standards and operation experience (OPEX) with functional disciplines and departments. Our Project Management Office possesses highly specialized, certified and experienced nuclear professionals including project managers, project control technicians and cost schedule analysts that can execute large and small scopes of work. Our project teams have a reputation of acute emphasis on scope and cost control and ensure that every project is executed with precision in order to meet budget and timeline expectations. Our confidence in the functionality of our internal Project Work Management Program enables us to stand behind our project performance with contractual performance guarantees.

- Procurement
- PMP
- Construction management
- Project controls (in line with station work management systems)
- Scheduling, resource loading, Critical Path Method (CPM)
- Primavera P6 intelligent software

RELIABILITY ENGINEERING

- Remote and/or on-site asset monitoring
- Uncover root cause of failures with advanced diagnostics
- Structural evaluation and corrective services
- Condition monitoring
 - ◊ Vibration analysis and advanced diagnostics
 - ◊ Motor Current Evaluation (MCE)
 - ◊ Ultrasound and infrared
 - ◊ Oil analysis
- Dynamic and static asset management
- Structural integrity
- Life cycle assessment and field services

MATERIALS ENGINEERING

- Failure and chemical analysis
- Weld qualification and weld process qualification
- In-situ metallography
- Full ISO 17025 lab services certified by A2LA

TOOLING & INSPECTION

- Tooling qualification and development
 - ◊ Design and manufacture
 - ◊ Inspection system qualification
 - ◊ Inspection personnel qualification
 - ◊ Inspection procedure qualification
- Maintenance work management programs
 - ◊ API compliant repairs and inspections
 - ◊ Standby generator storage fuel tanks
- Laser mapping
 - ◊ Long range (as built/left, correct component verification, training)
 - ◊ Short range (fit-ups, designs, conditions)
- Ground penetrating radar
 - ◊ Location of buried services

INSPECTION PROGRAMS

Repeatable analysis is an essential outcome; therefore, PAUT analysts are certified to both CGSB Ultrasonic Level 2, CSWIP/PCN EN473 in PAUT as well as qualified to the inspection program requirements. Additionally, the analysis process and inspection data management is designed to encompass construction parameters to ensure data artifacts will result in repeatable analysis reporting in line with code and technical specification requirements demonstrated in the technical justification.

Acuren Nuclear Services has gained extensive experience completing inspection campaigns. We understand that in addition to qualified inspection processes it is paramount that an experienced program team dedicate equal time to initiating, planning, executing, and closing out the project. A typical inspection program consists of:

- Project managers
- Planners
- CSA's
- Results coordinators
- Supervisors
- Data management system
 - ◊ Process control for human performance
 - ◊ Component based architecture for correct component verification
 - ◊ Role based accessibility and controlled qualification of task
 - ◊ Ensured adherence to procedure
 - ◊ Auditability
 - ◊ Data inputs (designed for mineable metrics to drive continual improvement and statistical analysis)
 - ◊ Performance
- Engineering
 - ◊ Weld engineer
 - ◊ Results coordination and reporting
- Quality
 - ◊ Quality control review and sign-off
 - ◊ Inspection test plan and traveler process
 - ◊ Performance statistics and LEAN methods for process improvement
 - ◊ Document control (digital and physical work package)
- Training and qualification program for feeder weld analysts (primary/secondary/resolution)
- Accepted feeder weld analysis procedures and project documentation (plans and ITP)
- Large pool of inspection personnel

ACCESS OPTIMIZATION

"Access Optimization" means we customize an appropriate access solution utilizing rope access, or traditional methods such as scaffold, in alignment with specific site constraints. Our approach typically yields significant productivity and efficiency gains with a lower cost of execution. Our RAT Team ropes experts have consistently led the industry in performing advanced scopes of work in difficult to reach locations.

We take an integrated approach to industrial inspection, monitoring, repair, and maintenance.

- Composite crews with multi-disciplined trades
- Certified IRATA personnel
- Customized access optimization programs
- Reduced down time, reduced risk, reduced cost

ENGINEERING, PROCUREMENT, & CONSTRUCTION (EPC)

We offer fully integrated engineering, procurement, and construction services in addition to project and construction management. By providing these services to our customers, we can help them significantly decrease risk, ensure performance, and improve the overall transition into operations.

- Engineering and Design
 - ◊ We perform traditional and advanced engineering, as well as detailed design for diverse clients worldwide.
- Procurement
 - ◊ We promote project cost controls and schedule certainty by managing the purchase and delivery of material required for clients worldwide.
- Fabrication
 - ◊ We have the capabilities to provide, self-perform and subcontract fabrication solutions to meet client's needs.
- Construction
 - ◊ We have experience using proven construction technologies and systems to meet clients demands.

- Maintenance
 - ◊ Acuren Nuclear Services can provide Operations and Maintenance (O&M) services to domestic and international clients to meet the needs of today's challenges.
- Project Management
 - ◊ Acuren Nuclear Services can provide project management, responsible for executing a single project; or as a program manager, with overall responsibility for complex programs.

SAFETY & QUALITY

Acuren Nuclear Services is built upon values of excellence and integrity. We work to the highest standards and being measured by the quality of execution within our projects. Year after year we are among the safest companies in our industry.

Our Experience

With over four decades of experience in the nuclear industry, we have the quality programs and certifications to execute large capital projects or intimate scopes of work.

MAJOR PROJECTS

- Active projects on major CANDU sites globally (OPG, Bruce Power, Pt. Lepreau Nuclear Generating Station, NASA)
- Refurbishment activities
- MSA's for conventional NDT/NDE inspections with various major sites
- Nuclear operations and work management
- Feeder PAUT (qualification and execution)
- Feeder thinning (baseline and inaugural)
- Nuclear balance-of-plant Eddy Current Program
- Storage tank repair and certification



At Acuren Nuclear Services, our crews are **scalable** and **mobile**, allowing us to deploy nuclear solutions **worldwide**.



PORT ELGIN (HEAD OFFICE) | COURTICE

1-866-443-3303  

www.acuren.com
nuclear@acuren.com



BEYOND INSPECTION