OBJECTIVES

- Basic design studies, definition studies, functional detailed design studies, wiring, cabinet integration, platform qualification, commissioning tests
- From process instrumentation to control and computer-aided management systems
- Obsolescence management of systems and equipment
- Expertise in upgrading existing facilities and development of complex equipments
- Cybersecurity expertise coming from Defense business experience

ENGINEERING

- Design, implement and integrate safe and reliable digital and analogue I&C systems. This includes qualification and maintenance
- Design and implement the related Integrated Logistics Support systems

TechnicAtome designs, implements and maintains digital and analogue I&C systems for projects such as compact nuclear reactors for naval propulsion, research or electricity production.

TechnicAtome’s I&C systems rely on proven design baselines and qualified platforms. They comply with nuclear industry requirements.
Design and implementation of I&C systems for nuclear reactors and facilities

PEOPLE

- A cross-disciplinary team with more than 30 years’ experience:
  - Architecture and design studies of I&C systems
  - Electronic for embedded equipment managing safety functions
  - Thermal-hydraulic, neutronic, radiological, physico- and radiochemical measurement
  - Cabinets for harsh environments
  - Connectors and cables
  - Embedded software
  - Training of I&C operators

RESOURCES

- High-performance infrastructure and tools at Aix-en-Provence and Cadarache sites (France):
  - Engineering tools to support design studies for definition and justification files, supported by PLM and CAD tools
  - I&C models coupled to a process simulator in the design, implementation and operating phases
  - Software engineering workshop with configuration management in all projects phases
  - Platforms for I&C systems integration and validation
  - Training platforms

METHODS

- Methods, processes and technical baselines compliant with the highest industry standards: CEI61513, CEI61226, CEI60880, CEI62138, RCC-E

The support of TechnicAtome’s engineering expertise in process, human factor, fluid systems, safety, reliability, layout, mechanical calculations ensures overall system expertise.