



# **GLOBAL** NUCLEAR SERVICES

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**SGS**



## GLOBAL SUPPORT FOR SAFETY

Transparency, performance, safety and reliability are becoming increasingly important issues for regulators, utilities and manufacturers. SGS, the world's leading inspection, verification, testing and certification company, is intensifying its focus on offering a wide range of services to support the nuclear industry in a global market.

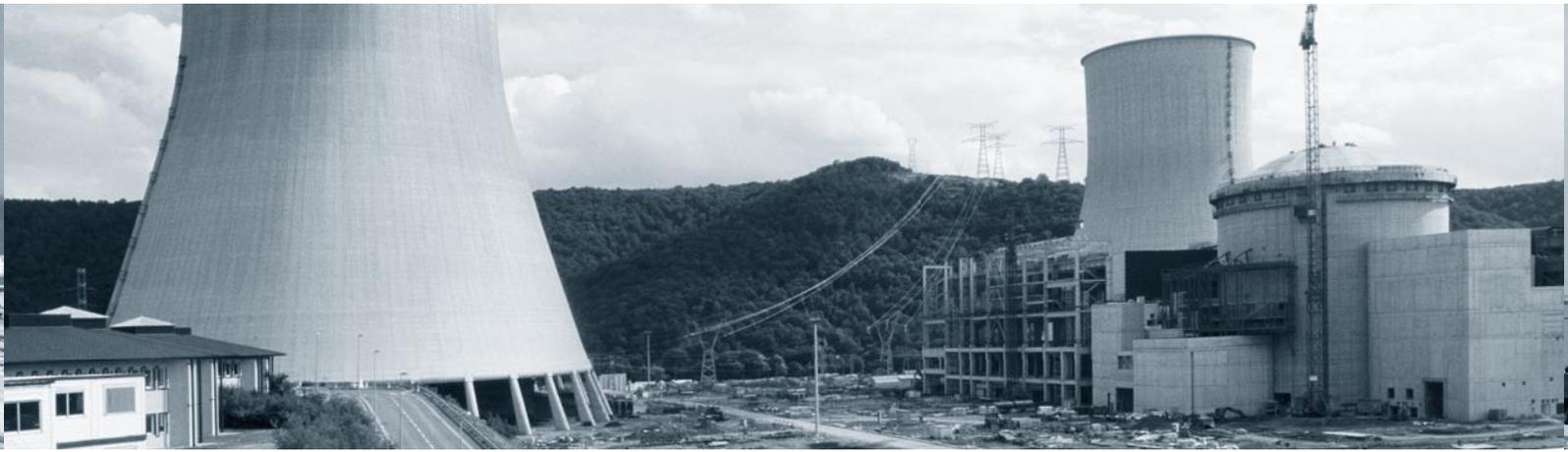
SGS offers a large variety of services and solutions all along the supply chain during operations, reprocessing and dismantling. SGS ensures that the installations, material, equipment, facilities and projects meet all quality and performance requirements.

The SGS worldwide network has accreditations for all major standards and is recognised as an independent and leading global benchmark in the fields of inspection, verification, certification and testing.

With experienced and qualified staff, SGS operates an extensive network of offices and laboratories to support various industries. With our unique global network, we can operate in every corner of the world, within hours or days.

Our independent services add significant value to our customer's operations, optimising their business sustainability, management of quality and competitiveness, while reducing delivery times.





## GLOBAL SUPPORT FOR PERFORMANCE

### SUPPLY CHAIN

In the global nuclear economy, there is an ever-growing need for solutions to offer control over time and distance. Engineering, Procurement and Construction (EPC) companies and utilities are sourcing from new nuclear equipment suppliers around the world, at the same time all contributors of the supply chain need to meet higher requirements, due to the evolution of technology. SGS protects client's interests when buying and selling. Our services include

- Supplier Assessment including design and specific standards
- Quality Health Safety & Environment (QHSE) 2<sup>nd</sup> and 3<sup>rd</sup> party audit
- Vendor Shop Inspection
- Material & Equipment Testing
- Non-Destructive Testing (NDT)
- Failure & Ageing Testing
- Pre-Shipment & Loading Inspection
- Expediting services
- Supply Chain audit
- Project Management services
- Surveillance activities
- Technical Assistance
- Tender Support
- Qualification of NDT methods

### CONSTRUCTION & COMMISSIONING

Nuclear power plant construction requires surveillance throughout the project. SGS helps clients to reduce risk, prevent construction errors, control budgets and effectively keep the construction project within deadlines, thus avoiding problems that might jeopardise the success of the whole enterprise. Our services include

- Civil Work Supervision and concrete expertise
- Supervision during assembly and testing of mechanical equipment, tanks, pipes, electrical devices, instrumentation, control system etc.

- Qualification of welding processes and welders
- On-site Inspection, NDT
- Statutory Inspection
- Commissioning Survey
- Start-up test supervision of equipment and systems
- Safety Coordination
- QHSE 2<sup>nd</sup> and 3<sup>rd</sup> party audit, Health, Safety & Environment (HSE) regulatory consulting
- Contract administration, Site coordination
- Verification of as-built documentation
- Final Acceptance on behalf of owner
- Technical Assistance





## GLOBAL SUPPORT FOR TRUST

### OPERATING

Production facilities must be regularly closed down or taken out of service for planned maintenance operations. Such shutdowns and turnarounds require specialist competencies to minimise the downtime, while covering all maintenance and repair tasks and meeting all regulatory requirements.

SGS has implemented a combination of high-end, specialised consultancy and traditional inspection and testing services to assist clients in managing shutdowns, turnarounds and routine maintenance.

Our services include

- In-Service Inspection, NDT
- Statutory Inspection
- Material & Equipment Testing
- Work Place Health & Safety
- QHSE & Quality System Audit
- Plant emission examination and analysis
- Energy audit and management
- Surveillance activities
- Technical Assistance
- Drumming Supervision of radioactive wastes

### RADIATION PROTECTION & DECOMMISSIONING

When a power company closes a nuclear power plant permanently, the facility must be decommissioned by safely removing it from service and reducing any residual radioactivity to a level that permits release of the property and termination of the operating license. SGS is able to offer its clients a full package for decommissioning, standalone or with the cooperation of partners. With over 25 years of experience and a complete understanding of regulatory constraints.

SGS supports decommissioning projects with a wide range of expertise.

- Practical radiation protection during decommissioning
- Radiation protection for spent fuel elements transport
- Nuclide analysis
- In-situ measuring
- Creating aliquot concept
- Aliquots sampling
- Waste pre-treatment
- Inner tube measuring
- Monitoring and handling nuclear fuel storage facility

### TRAINING

Management of competencies and the qualifications of personnel represent one of the key prerequisites in meeting nuclear demands, while the call for technical skills is increasingly exceeding the supply.

With over 30 years of experience, SGS training services provide world-class training solutions, which include

- NDT Training courses and examinations in accordance with EN473, ISO 9712, ASNT
- Teaching standards: QHSE, sustainability, internal specific standards etc.
- (Coaching for) QHSE internal and lead auditor courses
- Risk & Process approach, Balanced Score Card
- Mechanical & Electrical Inspection etc.
- ASME code
- Electrical, Instrumentation & Control Regulations
- Qualification of the worker as inspector, supervisor, auditor and for NDT
- Qualification and certification of welders and welding procedures
- Radioprotection



## 5 GOOD REASONS TO CHOOSE SGS



### RECOGNITION

Our many national, international and customer-specific accreditations give testimony to our competences. Our position has made us a reference in the nuclear industry for over 35 years. Nuclear requirements in safety and quality are at the core of SGS culture and organisation.

### EXPERIENCE & EXPERTISE

SGS employs a multi-disciplinary team of the best qualified and recognised technicians, engineers and experts, supported by global competency centres. We have decades of experience in the nuclear field and some remarkable references in many countries. With a full toolbox of competencies and management we are able to quickly build teams for specific projects and keep our people at the best level of training and qualification.

### A NETWORK TO ANSWER LOCAL NEEDS WITH GLOBAL SOLUTIONS

SGS operates a worldwide network of 1,250 offices and laboratories. With our unique global network, we can operate in every corner of the world. Local competencies combined with a strong global culture make us the ideal partner for multi-cultural project management.

### PROXIMITY & REACTIVITY

Delivery time is essential all along the nuclear cycle. Having the right expert resources in the right place guarantees efficiency to our clients, and this is a key strength of the SGS local and global organisation. SGS is constantly looking beyond customer's and society's expectations, in order to deliver market-leading services, wherever and whenever they are needed.

### INDEPENDENCE, TRUST & TRANSPARENCY

Everything we do is based on the principle of mutual trust. As our customer, you can rely on our extensive experience and wide-ranging network, and you can be certain of rapid assistance.

### CONTACT US

[WWW.SGS.COM/INDUSTRIAL](http://WWW.SGS.COM/INDUSTRIAL) OR [NUCLEAR.SERVICES@SGS.COM](mailto:NUCLEAR.SERVICES@SGS.COM)

