



Choose certainty.  
Add value.

## Licensing for nuclear power plants

Ensure nuclear safety from the onset.

### Your challenges

Nuclear power plays an important role in meeting the world's rising energy demands. The Fukushima Daiichi accident was a strong reminder of the importance of nuclear safety. Licensing is one of the first and most crucial steps in ensuring a safe and secure nuclear power plant (NPP) project. The key licensing issues are siting and evaluation of NPP concepts, hazard analyses, quality management systems, quality assurance and radioactive waste disposal concepts.

### What NPP licensing services does TÜV SÜD provide?

TÜV SÜD's experts support authorities in developing and defining national nuclear regulations and standards. We also provide consulting to assist developers and operators of NPPs in adhering to regulations and standards.

### Why are these services important for authorities, developers and operators?

Authorities need to identify all internal and external

safety factors that pose potential risks to the general public and environment. As an impartial partner familiar with international safety standards, TÜV SÜD assists authorities in creating national regulations and standards that mitigate risk and increase public acceptance of NPPs. Developers and operators have to ensure NPP safety, security and availability from the onset. TÜV SÜD provides expert support and training to ensure developers and operators achieve technical and environmental compliance with regulations and national standards.

### How can we help you?

TÜV SÜD provides objective and impartial technical consulting for NPPs along the entire project lifecycle, particularly in the area of licensing. Our experience encompasses all international and various national standards, guidelines and procedures for nuclear power generation. By adopting an integrated approach, we ensure a top-level view of the safety, availability and reliability of all structures, systems and components



(SSC). Our experts assist you with specialised state-of-the-art equipment, software and methodologies covering the full scope of NPP projects.

### Our services for NPP licensing

- **Consulting services for authorities**

Our experts support authorities in setting up a supervisory structure, developing a licencing process, determining the quality and scope of documents necessary for licensing, establishing a quality management system, and ensuring quality assurance for all mechanical, electrical and I&C components.

- **Assessment of documentation**

TÜV SÜD supports authorities with assessment and advisory services including siting and plant concepts, independent safety assessments, certification of mechanical, electrical and I&C components, on-site inspections, and control of documentation and reports.

We support NPP developers and operators to supplement safety assessments with technical expertise, assistance in performing the necessary external and internal hazard analyses, and expertise in quality assurance. Our experts provide consulting services that cover safety and environmental aspects based on in-depth familiarity with national regulations and standards including NUREG, ASME, German KTA standards, UK standards, KEPIC in Korea, GOST in Russia or RCC-M in France.

- **Training**

We provide training for staff of authorities, nuclear facilities and other related parties.

### Your business benefits

- **Minimise risk** – with our expertise and awareness of internal and external aspects of safety, and our decades of experience in supporting the nuclear sector to ensure quality and availability.
- **Benefit from complete solutions** – that cover the entire plant lifecycle including structures, systems and components as well as staff training.
- **Work with an expert partner** – and benefit from the capabilities of almost 1,000 highly qualified nuclear experts with an extensive understanding of standards and regulations, supported by an international network.
- **Ensure transparency** – with TÜV SÜD, a trusted and objective third-party organisation that will increase confidence and assurance in NPP projects.

### Why choose TÜV SÜD?

TÜV SÜD is an independent third-party organisation that provides impartial and objective consulting on NPPs. We offer end-to-end nuclear energy consultancy that begins with licensing and continues through to nuclear waste disposal and decommissioning.

Our world-class expertise includes extensive knowledge of national and international standards and regulations. With our international reach, we draw upon global best practices whilst taking into consideration the special needs of your local area.

### Choose certainty. Add value.

TÜV SÜD is a premium quality, safety and sustainability solutions provider that specialises in assessment, testing, inspection, auditing, certification, training and knowledge services. Represented in over 800 locations worldwide, we hold accreditations in Europe, the Americas, the Middle East and Asia. By delivering objective solutions to our customers, we add tangible value to businesses, consumers and the environment.

### Related services

TÜV SÜD provides the following related services:

- Design and construction of nuclear power plants
- Nuclear power plant operation
- Safety assessment of nuclear installations
- Radiation protection
- Nuclear waste management
- Nuclear decommissioning