

Job Title: Nuclear Safety Engineer IO1123/1124/1125

Requisition ID **7223** - Posted - (France, 13067 St Paul Lez Durance Cedex) - **Safety and Security - New Posting**

The ITER Organization brings together people from all over the world to be part of a thrilling human adventure in southern France—building the ITER Tokamak. We require the best people in every domain.

We offer challenging full-time assignments in a wide range of areas and encourage applications from candidates with all levels of experience, from recent graduates to experienced professionals. Applications from under-represented ITER Members and from female candidates are strongly encouraged as the ITER Organization supports diversity and gender equality in the workplace.

The ITER Organization (IO) is an Equal Opportunity organization committed to diversity and inclusiveness in the workplace.

As the IO attracts and retains people coming from a vast array of different backgrounds and cultures, bias and exclusion cannot be tolerated. The IO believes it is our diverse perspectives and backgrounds that gives unique strength and value to the ITER mission, regardless of race, member nation, gender, religion, status, sexual orientation, or disability - all are welcome and respected at ITER.

Our working environment is truly multi-cultural, with 29 different nationalities represented among staff. The ITER Organization Code of Conduct gives guidance in matters of professional ethics to all staff and serves as a reference for the public with regards to the standards of conduct that third parties are entitled to expect when dealing with the ITER Organization.

The south of France is blessed with a very privileged living environment and a mild and sunny climate. The ITER Project is based in Saint Paul-lez-Durance, located between the southern Alps and the Mediterranean Sea—an area offering every conceivable sporting, leisure, and cultural opportunity.

To see why ITER is a great place to work, please look at this [video](#)

Application Deadline: 04/02/2024

Department: Safety & Quality Department

Division: Nuclear Safety Division

Group: Not applicable

Job Family: Project Support

Job Role: Project Coordinator – 2

Job Grade: P2

Language Requirements: Fluent in English (written & spoken)

Contract Duration: Up to 5 years

Purpose

As a Nuclear Safety Engineer, you will perform nuclear safety analyses regarding the potential events and hazards that could occur in the facility, in support of the ITER nuclear safety demonstration and licensing process.

Additionally, you will also provide support to the engineering and construction teams in the application of nuclear safety requirements arising from the analyses, you will verify the compliance of the systems with these safety requirements, and you will assess proposed modifications in relation with nuclear safety.

Background

Major risks for people, facilities and/or the environment can be triggered by internal hazards (fire, explosion, thermo-hydraulics, etc.) or external hazards (earthquakes, road traffic, neighboring industrial facilities, etc.).

Within the Safety and Quality Department (SQD), the present role covers the safety analyses required for nuclear risks to be integrated and propagated to the appropriate lines of defense into design, procurement, construction, assembly, qualification, commissioning and operation phases of ITER nuclear facilities.

Key Duties, Scope, and Level of Accountability

- Performs specific nuclear safety analyses regarding postulated initiating events, internal and external hazards, and develops the documentation associated with these analyses, and communicates outcomes to internal and external stakeholders;
- Prepares technical responses at the request of the nuclear safety authorities during the examination of the ITER safety files, through written documents, presentations, and discussions with the authorities and their technical advisors;
- Implements and verifies propagation of the nuclear safety requirements for all protection important systems and components within the project;
- Verifies the compliance of the identified protection important components with their defined nuclear safety requirements;
- Performs safety engineering activities for confinement systems, mechanical systems, or instrumentation and control systems;
- Supports the design teams, by participating to gate reviews and by verifying the systems compliance;
- Takes editorial responsibility for relevant sections of documentation prepared for submission to the French nuclear safety authorities as part of the ITER licensing process;
- Participates in the identification and surveillance of protection important activities on the ITER worksite, including through on site verifications of manufacturing or installation activities;
- May be requested to perform other duties in support of the project;
- May be required to work outside ITER Organization reference working hours, including nights, week-ends and public holidays.

Measure of Effectiveness

- Proactively executes all functions as described above, in line with the relevant deadlines, cost and schedule;
- Effectively performs nuclear safety analysis activities, ensuring compliance with the French regulations, within defined timelines;
- Shows commitment to the ITER safety approach, and effectively propagates the resulting safety requirements within the Organization
- Effectively communicates and collaborates with all IO and DA stakeholders to ensure a smooth execution of the required tasks;
- Develops clear, high quality documentation concerning safety analyses including all relevant nuclear safety requirements;
- Contributes effectively to the acceptance of the ITER safety case by the French Nuclear Safety Authorities.

Experience & Profile

- **Professional Experience:**
 - Minimum 5 years' experience in nuclear safety, in particular during design, manufacturing and onsite installation phases (i.e.: design management, engineering, construction) within complex projects;
- **Education:**
 - Master's degree or equivalent in nuclear safety, nuclear engineering or other relevant discipline;
 - The required education degree may be substituted by extensive professional experience involving similar work responsibilities and/or additional training certificates in relevant domains.
- **Language requirements:**

- Fluent in English (written and spoken);
 - French language skills (written and spoken) are advantageous.
- ***Technical competencies and demonstrated experience in:***
 - Nuclear Safety Principles: In depth knowledge of the principles of nuclear safety, understanding of their use and experience in verifying their application;
 - Nuclear Safety Analysis: Practice in nuclear safety analyses regarding postulated initiating events or internal and external hazards;
 - Risk Identification and Management: Supporting and advising on on-site activities impacted by nuclear safety, in particular for confinement systems, mechanical systems, or instrumentation and control systems;
 - Drafting and Reviewing documents: Ability to make clear summary and synthesis of documents and to write reports, in particular to document the safety analyses performed;
 - Writing and presentation: write and review contractual and technical documents in the domain of expertise, document and transmit knowledge with data, clarity, and precision;
 - Quality Control: Supervision or quality control of manufacturing and assembly activities for protection important components is an advantage;
- ***IO Core Behavioral competencies:***
 - Collaborate: Ability to facilitate dialogue with a wide variety of contributors and stakeholders;
 - Communicate Effectively: Ability to adjust communication content and style to deliver messages to work effectively in a multi-cultural environment;
 - Drive results: Ability to persist in the face of challenges to meet deadlines with high standards;
 - Manage Complexity: Ability to analyze multiple and diverse sources of information to understand problems accurately before moving to proposals;
 - Instill trust: Ability to apply high standards of team mindset, trust, excellence, loyalty and integrity;
 - Decision Quality: Holds others accountable for making sound decisions that comply with policies and standards.
- ***Additional Behavioral Competencies:***
 - Drives vision and purpose: paints a compelling picture of the vision and strategy to motivate others to action, promoting a high level of nuclear safety culture.

The following important information shall apply to all jobs at ITER Organization:

- May be requested to perform other duties in support of the project as defined by your line manager, and when relevant upon the request of the matrix manager;
- Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, and ITER Values (Trust; Integrity; Excellence; Team mind set; Diversity and Inclusiveness);
- ITER Core Technical Competencies (Knowledge of these competencies may be acquired through on-board training at basic understanding level for all ITER staff members) :
 - 1) Nuclear Safety, Environment, Radioprotection and Pressured Equipment
 - 2) Occupational Health, Safety & Security
 - 3) Quality Control & Quality Assurance Processes
 - Implements the technical control of the Protection Important Activities, as well as their propagation to the entire supply chain;
 - May be requested to be part of any of the project/construction teams and to perform other duties in support of the project;
 - Informs the IO Director-General or Department Head of any important and urgent issues that cannot be handled by line management and that may jeopardize the achievement of the Project's

objectives;

- For staff expected to perform on-call, shift hours, or other work outside ITER Organization reference working hours, including nights, weekends, and public holidays, the possession of a driving license valid in France is required. No commuting vehicle will be provided by the ITER Organization.