

# Job Title: Hot Cell Nuclear Project Engineer IO0259

Requisition ID **7060** - Posted **31/05/2023** - (France, 13067 St Paul Lez Durance Cedex) - **Engineering of Systems - 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.

ITER Organization (IO) is an Equal Opportunity/Inclusive organization committed to diversity in the workplace, with diversity and Inclusiveness being one of the ITER Values.

As IO attracts and retains people coming from a vast array of different backgrounds and cultures, bias and exclusion cannot be tolerated. 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:** 25/07/2023

**Department:** Engineering Design Department

**Division:** Hot Cell Facility Division

**Group:** Not applicable

**Job Family:** Engineering

**Job Role:** Coordinating Engineer

**Job Grade:** P4

**Language Requirements:** Fluent in English (written & spoken)

**Contract Duration:** Up to 5 years

## **Purpose**

As a Hot Cell Nuclear Project Engineer, you will be responsible for the nuclear safety design and integration of the ITER Hot Cell Facility Project. These activities are currently in progress and require strong nuclear safety analyses and nuclear safety optimizations to lead a robust safety file that complies with the expectations of the French Nuclear Regulator. You will partner with engineers in charge of the remote maintenance, the waste treatment, and the mechanical and building design to contribute to the design to cost effort through your experience in safety practices in nuclear facilities.

## **Background**

The Hot Cell Facility Division is in charge of the Project to design the ITER Hot Cell Facility. This includes the integration and coordination of the design, manufacturing, construction and commissioning

efforts for all disciplines that such a nuclear facility entail.

This role will coordinate across ITER organizational units as well as external stakeholders like ITER domestic agencies. The role is assigned to the Hot Cell Project Coordination Group.

### **Key Duties, Scope, and Level of Accountability**

- Develops the safety analyses roadmap, in close relation with the Safety & Quality Department, in order to set-up a clear strategy of work to be implemented with the design team;
- Leads the safety analyses regarding internal and external hazards and develops the associated documentation;
- Proposes innovative approaches, under the Safety & Quality Department guidelines, to strengthen the design optimization;
- Ensures that safety requirements are fully propagated for all protection important activities and systems within the project;
- Coaches and trains design engineers to improve the safety culture within the project team;
- Steers the 'Project safety board' to ensure the full compatibility in between defined requirements documents and their effective application in the field;
- Manages and coordinates actions of others that contribute to the safety analyses;
- Shares and works in close relation with Domestic Agencies and F4E in particular to ensure an homogeneous safety approach
- Coordinates nuclear safety for all subcontractors participating to the Hot Cell Facility Project;
- Acts as a contract responsible officer for any support contracts in nuclear safety that could be placed by the HCF Division;
- May be requested to perform other duties in support of the project;
- May be required to work outside the ITER Organization (IO) reference working hours, including nights, week-ends and public holidays.

### **Measure of Effectiveness**

- Completes the safety design and integration methodically and issues safety documents within defined parameters;
- Completes safety analyses in collaboration with the design team within defined timelines; Proposes safety optimizations that meet the cost containment approach as well as the Nuclear Safety Authority expectations;
- Ensures full traceability of the changes and justifications that could occur all along the project timeline;
- Efficient contract management with subcontractors involved in safety matters.
- Enhances the safety culture within the Project team, and strengthens relationships with stakeholders, integrating feedback when possible;
- Provides accurate expertise and sound advice to the HCPC Group Leader and the HCF Division Head.

### **Experience & Profile**

- **Professional Experience:**
  - Minimum 10 years' experience in nuclear safety design and integration in the field of nuclear fission and/or fusion facilities within complex international environments or projects.
- **Education:**
  - Master's Degree or equivalent in nuclear safety or nuclear engineering involving nuclear safety aspects 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:***

- Analysis, requirements definition, risk identification and management: leverages appropriate tools to conduct nuclear safety analyses, adapting proposed solutions to the environment and constraints, cascading customized requirements and documentation;
- Best practices with the Nuclear Safety Authority, and experience with the French Basic Nuclear Installation (INB) rules, IAEA safety standards, or with similar nuclear regulations;
- Main hazards in Basic Nuclear Installation (INB) rules and in defense-in-depth concept;
- Quality Management: knowledge of product and/or management requirements for international quality standards, methods, and practices;
- Confinement of chemical and radioactive materials, including limitation of radiation exposure aspects;
- Writing and presentation: write and review contractual and technical documents in the domain of expertise, document and transmit knowledge with data, clarity, and precision;
- Problem solving: assess problems, identify root causes, and reach practical solutions in a consistent way to reach project objectives;
- Planning: define scopes of work, estimating cost, sequencing, risk and planning for change management;
- Project control and reporting: measuring progress of project work, managing risks and reporting on progress;
- Hot cells design and remote handling equipment would be an advantage;
- Tritium aspects would be 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.

- ***Additional Behavioral Competencies:***

- Drives Engagement: creates a climate where people are motivated to their best to help the organization achieve its objectives, especially related to nuclear safety aspects.

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

- Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, ITER Values (Trust; Loyalty; Integrity; Excellence; Team mind set; Diversity and Inclusiveness) and Code of Conduct;
- 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 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 work on beryllium-containing components. In this case, you will be required to follow the established ITER Beryllium Management Program for working safely with beryllium. Training and support will be provided by the ITER Organization;
- 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.