Job Title: Safety Control Systems Technician IO1034

Requisition ID **3801** - Posted **19/03/2021** - (France, 13067 St Paul Lez Durance Cedex) - **Control and Data Acquisition** - **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.

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: 02/05/2021
Domain: Science & Operation
Department: Science,Controls & Operation
Division: Controls
Section: Facility Control System
Job Family: Project Engineering
Job Role: Coordinating Technician Engineer - Early Career
Job Grade: G5
Language requirements: Fluent in English (written & spoken)
Contract duration: Up to 5 years

Purpose

As Safety Control Systems Technician, you will focus on the design and validation of the Central Safety System for Occupational Safety (CSS-OS) and compliance with safety-related standards.
Additionally, you will participate in the development and testing of the safety systems devices used within or interfacing with the Safety Control Systems, and provide hands-on services and help on electronics and automation issues in safety prototypes.

Background

ITER will be equipped with safety control systems distributed throughout 50-100 plant systems, with this role contributing to the deployment, commissioning and maintenance of the Central Safety Systems (CSS) within the responsibility of the FCS Section. These safety control systems are organized in two layers: a local layer implemented by each plant system and a centralized layer for those combinations of plant system conditions that require a coordinated action, even though each plant system may be within its own safe limits. The integrated safety control systems are divided in two independent sub-systems: the Safety Control System for Occupational Safety (SCS-OS) in charge to protect people against conventional safety risks and the Safety Control Systems for Nuclear (SCS-N) protecting people against radiological hazards.

Major Duties/Roles & Responsibilities

- Prepares the required installation documentation folders in the scope of the Central Safety Systems;
- Executes test procedures and generates the associated test reports;
- Diagnoses errors and implements solutions related to safety Programmable Logic Controllers (PLC) and their interfaces with the Safety System;
- Updates and maintains data and documentation related to Plant Safety System (PSS) I&C interface with the Central Safety System;
- Develops off-line test facilities, focusing on PLC, to be used as a tool for diagnosing errors and implementing improvements;
- Participates in the commissioning of Plant Safety Systems after the integration with the Central Safety System has been achieved;
- Supports the application and use of ITER I&C standards;
- May be requested to be part of any of the project/construction teams and 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

- Delivers installation documentation packages within expected quality and schedule constraints;
- Efficiently supports the commissioning, validation and maintenance of integrated ITER Plant Safety Systems;
- Develops and implements solutions in a timely manner, to achieve ITER plant systems integration;
- Maintains up-to-date the documentation related to plant safety I&C systems interface with Central Safety System;
- Applies ITER Instrumentation & Control standards promoted by the Controls Division to a high level of accuracy.

Experience & Profile

- ***Professional Experience:***
  - At least *7* years' experience working as control technician in the field of safety I&C systems engineering;
- ***Education:***
  - Bachelor degree or equivalent in Electronics, Computer Science, Electro-mechanics field 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).
- ***Technical Competencies and demonstrated experience in:***
  - Production of installation documentation related to safety control I&C devices: cabling diagrams, termination reports, and installation procedures;
  - Acceptance testing and commissioning of I&C industrial systems; in particular troubleshooting, wiring and testing electrical low-voltage enclosures;
  - Operations execution: execute tasks with consistency, self-testing and feedback, adapt to changing context;
  - Problem solving: assess problems, identify root causes, and reach practical solutions to reach project objectives;
  - Laboratory tools such as oscilloscopes, multi-meters and signal generators;
  - The use of industrial PLC based systems;
  - Safety hardware and software development tools such as Siemens S7 is considered as an advantage.

- ***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.

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 of 1) Nuclear Safety, environment, radioprotection and pressured equipment 2) Occupational Health, safety & security 3) Quality assurance processes. Knowledge of these competencies may be acquired through on-board training at basic understanding level for all ITER staff members;
- 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, Domain Head, or Department/Office 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.