Job Title: Electrical / Instrumentation & Control Engineer TCWS-019&035

Req ID **1761** - Posted **15/05/2020** - (France, 13067 St Paul Lez Durance Cedex) - **Construction and Installation** - **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: 26/06/2020
Domain: Construction
Department: Machine Construction
Division: Tokamak Complex
Section: Tokamak Cooling Water System
Job Family: Project Engineering
Job Role: Engineer - 2
Job Grade: P3
Language requirements: Fluent in English (written & spoken)
Contract duration: Up to 5 years

Purpose

Two openings: one position will focus on electrical systems and equipment (medium and low voltage) and the second will be concerned with Instrumentation & Control (I&C).

You will be responsible for the construction design and procurement of the Tokamak Cooling Water System (TCWS) either focusing on Electrical or on I&C systems. As part of this role, you will support installation and commissioning of the TCWS defined systems. You will monitor the procurement process and provide technical support colleagues in the Procurement and Contracts Division during calls for tenders.

Background

The TCWS Section is responsible for the design, procurement and installation oversight of the complete cooling water system for the Tokamak Machine. This work is done partly in-house at the ITER Organization and also by the Domestic Agency of the United States of America. The oversight of the installation of the entire TCWS is done by In-house resources of the ITER Organization including the management of changes, non-conformances and deviations. The TCWS Section is located within the Construction Department and works in close coordination with the on-site installation teams.

Major Duties/Roles & Responsibilities

- Develops the global functional analysis, architecture and process control for TCWS for the defined scope of work;
- Develops the construction design of TCWS Electrical or I&C systems, including software (Note: software is included wherever TCWS I&C systems are mentioned)
- Provides Procurement and Contracts Division with all necessary information and technical expertise for the call for tenders;
- Monitors several contracts for the procurement of TCWS electrical and I&C systems;
- Ensures that all requirements and interfaces are duly propagated in the design and construction of the TCWS Electrical and I&C systems, by working in close collaboration with all internal stakeholders and US Domestic Agency (DA);
- Performs surveillance on Procurement Arrangements and provides information as required related to procurements progress to the US DA;
- Supports the installation, commissioning and operation of the TCWS electrical and I&C systems interfacing as necessary with internal and external stakeholders;
- Manages the delivery and installation (including Engineering Work Packages) of TCWS Electrical or I&C systems;
- 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

- Develops the TCWS Electrical or I&C systems construction design in accordance with the overall project schedule;
- Ensures TCWS electrical or I&C contracts ensuring that components (and software) are delivered on time, within budget and respecting all requirements and interfaces;
- Issues Engineering Work Packages for TCWS Electrical or I&C systems, in accordance with the construction schedule;
- Manages the schedule efficiently to ensure the timely delivery and installation of TCWS Electrical or I&C systems.

Experience & Profile

- ***Professional Experience:***
  - At least 8 years' experience working as Electrical and/or I&C engineer, on the design, procurement of electrical and/or I&C systems including installation, commission and/or operation of complex installations;
  - Previous experience in the nuclear filed for a large and complex cooling water system would be highly desirable.
- ***Education:***
  - Master degree or equivalent in Electrical or Instrumentation Engineering 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:***
  - Electrical and/or I&C systems including the ability to generate construction design documents and provide expertise for at least one of these fields;
  - Project & supply contract management, procurement including writing technical specifications;
  - Resolving complex and challenging technical issues or problems, drawing on experience and expertise;
  - Nuclear field would be a strong advantage;

- Installing, testing and operating large and complex cooling water system would be highly desirable.

- ***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, **r**adioprotection 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 lline management and that may jeopardize the achievement of the Project’s objectives.